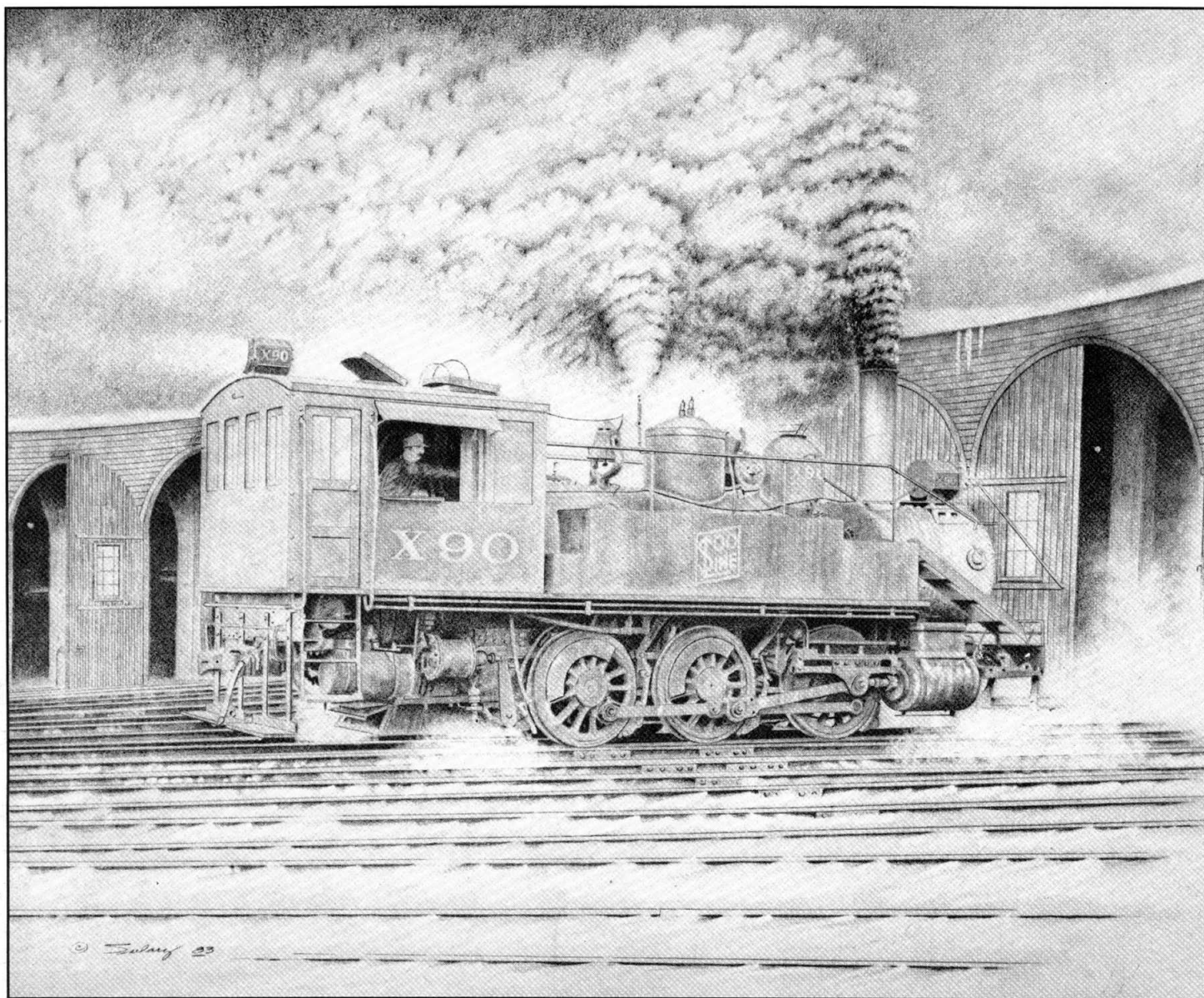


Minnesota Transportation Museum

MINNEGAZETTE

Summer 1994





Van Depoele Electric Railway in operation at Minneapolis.—"The rush to Calhoun, Harriet and Minnetonka yesterday was unprecedented, and the Motor Line was crowded all day long. The electric motor found itself packed to the utmost, but met all demands, pulling eight loaded cars at one time. If this rush continues the company must lay in some new coaches."—*St. Paul Daily Globe.*



Official Publication of the
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SUBMISSIONS

The *Minnegazette* welcomes submissions for publication of articles, photos and other illustrative materials of historical interest relating to transportation in the Upper Midwest. No payment is made, and publication is at the editor's discretion.

MUSEUM PURPOSE

The Museum is a non-profit educational corporation organized in Minnesota in 1962 to preserve and communicate to the public the experience of Minnesota's surface public transportation history. It operates the Como-Harriet Streetcar Line and the Minnehaha Depot in Minneapolis, the Jackson Street Roundhouse in St. Paul, the Osceola & St. Croix Valley Ry. in Osceola and the Steamboat Minnehaha restoration in Excelsior.

MEMBERSHIPS

Individual	\$ 25	Family	\$ 30
Sustaining	\$ 50	Sponsor	\$ 100

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THANK YOU FOR YOUR GENEROSITY

-To the **Metropolitan Transit Commission** for donating its collection of non-Twin City streetcar and bus tokens.

-To the **Onan Family Foundation** for its \$3500 grant to the Traction Fund, and for its \$2500 grant to the Museum Services fund to replace the *Minnegazette* Editor's computer.

-To **Terry Wulf**, for his donation of 80-90 gear lube for the PCC trucks.

-To **Tom Rollo**, for his donation of four dozen low voltage light bulbs to the PCC project.

-To **Charles Barthold** for his donations to the Railroad and PCC Funds, which have been matched by Gannett Communications Fund.

-To **Art Nettis**, the **Cooperating Fund Drive** and **Foreign Service Import Auto Repair** for their donation to the Museum Services Fund.

-To **George Isaacs**, **William J. Olsen**, **Calvin Forbes** and **Russell Olson** for their donations to the PCC Fund.

-To **Art Pew**, for his donation of a wood Great Northern caboose and a 480 volt transformer and battery charger.

-To **Minnesota Clay Co.** for its donation of a 40 foot steel MN&S boxcar.

-To the many Steamboat Fund contributors. See Page 12 for a complete list.

CORRECTIONS & NEW INFO

Russ Olson points out that the photo of the TCRT ferryboat on page 30 was taken at Big Island, not at Excelsior. See that ornate lamppost in the left side of the photo? The head of one was recovered from the lake bottom and is being restored by **Tom Mann**.

Front cover: The X-90 on duty at Shoreham, as Twin Citians remember it. Whatever happened to it? To find out, see the story on page 14.

Drawing by MTM member Phil Sularz.

Inside front cover: Minnesota's first experiment with electric traction occurred when the steam powered Minneapolis, Lyndale & Minnetonka, beset by air pollution complaints in downtown, built a pioneer locomotive designed by Charles Van Depoele. It test ran in Dec. 1885, and in Jan. and Feb. 1886. Shown here is the scheduled service that ran from May through Sept. 1886 on 1st Ave. S. (now Marquette) between 2nd and 6th Streets. Poor reliability ended the experiment. Minneapolis Public Library collection.

Our apologies to **Gordon Pederson** for misspelling his name in the photo caption on page 11.

Tony Becker recognized two of the three Great Northern crew members standing in front of the William Crooks on page 27. They are (left) machinist **Al Dick** and Jackson Street General Foreman **Joe Sullivan** (center). The "One Spot", as the employees called it, was based at Jackson Street. Tony remembers them rebuilding the tender there. Sullivan was responsible for saving the engine when a company official misguidedly ordered it scrapped in the late 40's. He hid it for a few years in a corner of the Dale Street Shops until management changed its mind.

ANNOUNCEMENT OF MTM BOARD ELECTION

Once again it's time to announce the annual election of Board of Trustee members. There are five elected Trustees who serve overlapping two year terms. This year the seats occupied by **Richard Fish**, **Aaron Isaacs** and **Art Nettis** are up for election.

In order to be placed on the ballot, a member must submit a petition with the signatures of 30 current members to the Election Committee by Thursday Sept. 15th Mail the petitions to MTM Election Committee, PO Box 17240 Nokomis Station, Minneapolis MN 55417-0240.

The Election Committee members this year are **Louis Hoffman**, **Morten Jorgensen** and **Michael E. Miller**. Ballots will be mailed to eligible members by Sept. 26th. Return ballots must be postmarked by Oct. 15th.

The election results will be announced at the annual membership meeting on Oct. 25th.

CHAIRMAN'S COLUMN

-John Diers

This is my fourth year as Chairman. Most of the first three years were spent on administrative matters. First came the desperate attempt to save the Stillwater railroad, followed by the chore of selling it to the Minnesota Zephyr and the very big job of getting the Osceola & St. Croix Valley Ry. off the ground. This year I decided to have some fun and tackle a hands on project. I refer, of course to Great Northern business car #A-11. Last fall we brought it out to Osceola and cleaned it up as much as possible for use in extra fare service. **Bob Clark** gave me a short, white lounge car attendant jacket and I went about the business of serving soft drinks to our guests.

Ridership was excellent. The car consistently sold out. Soon I was joined by other volunteers; **George Isaacs**, **Louis Hoffman**, and my wife, Marcia. Suddenly the O&StCV was in the carriage trade and I was fantasizing about being a later day **Fred Harvey**. I've always had a soft spot for first class service, be it in a Pullman sleeper, a lounge car or a diner.

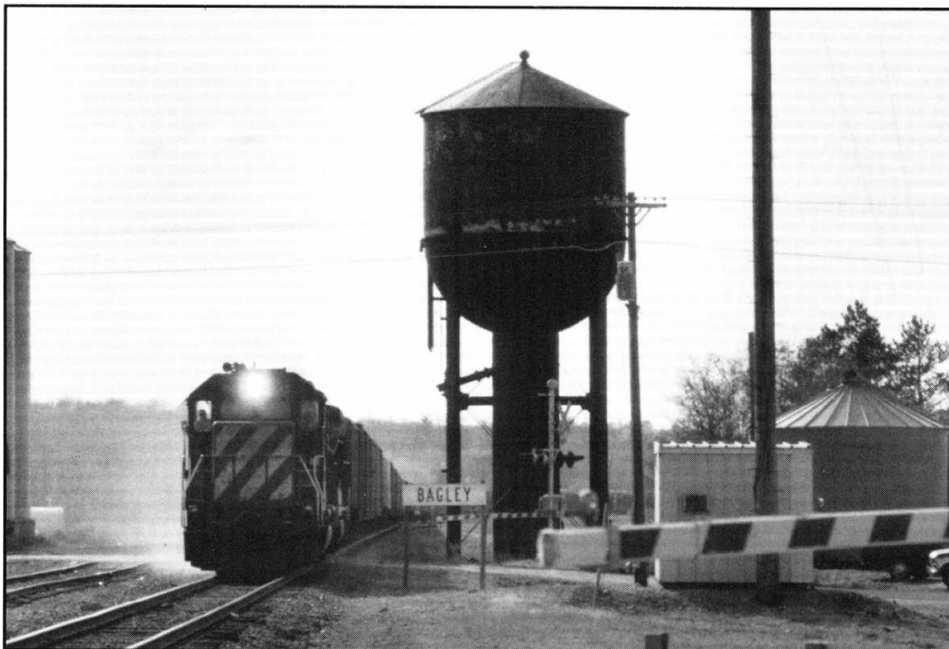
In the late forties my parents lived in the east. I can remember many trips home to St. Paul aboard the Broadway, the Century, the Zephyr and the Hiawatha. When I grew up and went to college I usually made enough money at summer jobs to do some traveling. The crowds went to Florida. I rode trains. It was the early sixties and there was still some fine, first class service around. By then, of course, the handwriting was on the wall. Everything was running on borrowed time. Time tables kept getting smaller as trains were dropped or downgraded. In a few years it was all coaches and automats. Amtrak euthanized what was left. I had almost forgotten this until #A-11 came along. It was just the right tonic.

Though in reasonable mechanical shape, #A-11 clearly needed a facelift. The carpet was threadbare, the chairs were rickety, an exterior painting was overdue, and that interior salmon paint just had to go. **Dick Fish** budgeted funds for the work, much of it to be done commercially. The

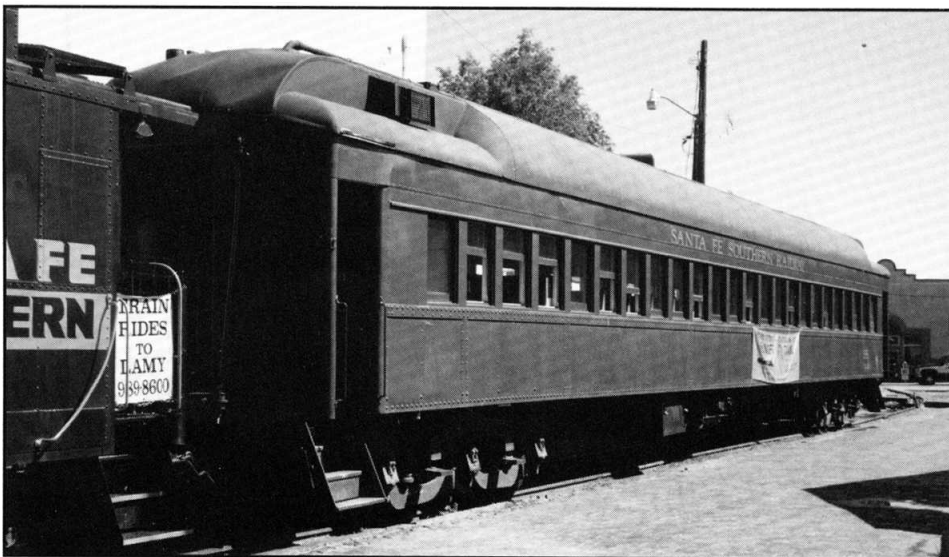
Railroad Fund is much healthier after last year's record ridership, so there is now an alternative to 100% sweat equity.

Marcia selected the interior colors, carpeting and new upholstery for the chairs to be recovered. From a used commercial furniture dealer we purchased 17 hotel lounge chairs. Others from the same lot had been bought by someone else and were headed for a commercial reupholsterer. So we piggybacked on their order and got the work done at a considerable savings.

Bernie and Grace Bjorklund of Dresser, WI joined our weekend work parties along with **Bob Clark** and **Steve Stocker**. As this is written we have completed repainting the walls in the lounge area, new carpeting has been laid, and some of the reupholstered furniture has been returned. We hope to have the main room done including some additional furniture such as a small bar and several tables. We have already picked up a postwar Northern Pacific floor stand ashtray/drink holder. Other decorating, including stenciling



This Great Northern steel water tank survives in Bagley, MN., on the line from Grand Forks to Bemidji and Superior. It stands across the tracks from the Great Northern Bar and Grill. Aaron Isaacs photo.



Louis Hoffman discovered this Great Northern heavyweight coach in service on the Santa Fe Southern's mixed train in Santa Fe, NM. It was a stripped work train car, and has been refitted with rather crude wooden seats.

and curtains will be added as the season progresses.

Because it has been rebuilt so many times, #A-11 cannot be truly restored without a major effort and attendant expense. The plan is to make it useful as a lounge observation car suitable for regular service and special events.

#A-11 has had a checkered history. It was built in 1910 by Barney and Smith as a compartment observation car for the Oriental Limited. A 1922 shopping transformed it into business car #A-1, reportedly for Great Northern President **Louis Hill**. Subsequent shoppings in the 30's and 40's modernized the car with air conditioning and a rounded roof. The car was renumbered once as #A-6 and finally as #A-11. In the early 1970's Burlington Northern decided to cull some of the older cars from its merged business car fleet and #A-11 became an instruction car. In the process it lost all of its posh appointments including a dining room, three of its state rooms and a shower/bath. Most of the woodwork also disappeared, replaced by aluminum panels.

Despite being such a morphodite, there are still touches that can be restored. **Bernie Bjorklund** found the original inlaid Honduran mahogany of the rear door and frame under nine coats of paint. Similarly, under that awful pink in the window frames is a beautiful birch which is being stained and restored. Pulling up the carpet revealed the original wood floor. You can clearly see where the old rooms and partitions were.

This year we are confining our efforts to the main lounge room. The secretary's stateroom, porter's room, pantry and kitchen will be left for next year. At some point it may be possible to reactivate the kitchen and offer a simple food service. To do so now will require more mechanical and electrical work than funding permits. The car also retains a separate hot water heating system which could be restored allowing use of the car during the cold weather months.

The last major effort this year will be to sandblast and repaint the exterior in the Empire Builder colors. By Labor Day work should be complete and the car will be placed in scheduled service. Before Labor Day we plan to use it only for special groups and then only if it doesn't interfere with the renovation work.

Louis Hoffman has volunteered to head up the Dining and Parlor car Department of the O&StCV. Give Louis a call if you would like to work as a waiter or steward aboard the #A-11. Louis is purportedly putting together a training program in the best Pullman tradition. We hope to assure a proto-typical experience for our customers by providing attendants with an aloof demeanor and proper attitude. Practice saying, "very good sir."

BOARD OF TRUSTEES

April 1994

The Board did not meet in April.

May 1994

-Approved the 1994 Traction, Railroad and Steamboat Fund budgets.

June 1994

-Approved the Museum Services and Board of Trustees Fund budgets.

-Approved a museum-wide collections policy.

TRACTION REPORT

-**Louis Hoffman**

Working with wood

Has anyone noticed all the spiffy new carpentry around the Como-Harriet Line? It's courtesy of our own multi-talented **Jeanne Inselman**. We recently learned that Jeanne, our volunteer insurance agent, is also a talented carpenter. Such discoveries tend to start wheels turning in the mind of your General Superintendent. In a few short months, Jeanne has designed and turned out numerous high quality products.

New racks aboard the two standard streetcars allow the full array of brochures to be displayed in public view along with a separate slot for each paper souvenir item. In the Linden Hills depot, Jeanne will produce a donation box to soak up (we hope) a lot of spare change and bills. Also in the depot is a new brochure rack big enough to hold materials promoting the entire far flung MTM empire, plus a few of our friends like the Twin City Model Railroad Club, which kindly stocks our brochures at Bandanna Square.



Bus Foreman **Joel Gensler** behind the wheel. **Louis Hoffman** photo.

Good News/Bad News Dept.

This spring the legislature appropriated \$10,000 to the Museum for the restoration of PCC #322. Supported by the Minnesota Historical Society, the bill was initiated and shepherded through the legislative process by **Rep. James Rice** of Minneapolis. Unfortunately the funds were line item vetoed by **Gov. Arne Carlson**. The Museum extends its warmest appreciation to Rep. Rice and all who supported this measure.

That was the bad news. The good news is that the Traction Division's application for \$120,000 under the Intermodal Surface Transportation Efficiency Act (ISTEA) has scored well in the initial review process, ranking 17th out of 38. As this is written, it much receive approval from various Metro Council committees, the full council and the federal bureaucracy. If approved, the Traction Division will match the federal funds with \$30,000, making for a total value of \$150,000.

The money will be used to expand the existing carbarns to accommodate the PCC, and improve the existing buildings with insulation, gas heat, concrete floors and a second pit. It will also permit the restoration of the remaining TCRT structures along the line (the steps at the Cottage City stop at William Berry Road, and the pedestrian underpass and steps north



Lowell Wood and Roy Harvey unload a GE motor-generator set purchased from the Fox Valley Trolley Museum. It will be a spare for PCC #322. It was completely reconditioned by the Chicago Transit Authority before being declared surplus. George Isaacs photo.

of 42nd Street) and returning as much of the line as possible to its 1900-1914 appearance (wrought iron fencing between the tracks and a granite paver crossing at 42nd Street).

If approved, the work would not begin until at least the spring of 1995. Thanks to the Minneapolis Park & Recreation Board, especially Assistant Superintendent **Al Whitman** and Planner **Maureen Durand** for their invaluable assistance. Thanks also to **Tom Becker** of Minneapolis Traffic Engineering for his help.

#1300 winter work complete

It's not something most of us will notice, but #1300 has been partially reroofed. The new canvas replaces the job done in 1963 when the car was first fixed up at the Minnesota Transfer roundhouse. #1300 also received some new wiring, replacing portions where the insulation was sloughing off from advanced age.

Carbarn site approved by Park Board committee

The Park Board has approved a site for more carbarn capacity, but it isn't exactly what we had in mind. Instead of a new two-car barn at either the archery range or in front of the existing maintenance barn, they will only permit an incremental expansion of the existing buildings. Specifically, the maintenance and ready barns will be extended north

about ten feet. The open area between the ready barn and the storage barn will be filled in. The end result will be room for one additional car, the PCC.

If there is an upside to this, it is that the smaller car barn will cost less to build, freeing up more ISTE A money for other improvements.

MTC donates token collection

The Metropolitan Transit Commission has donated its collection of non-Twin City streetcar and bus tokens. The collection was accumulated by MTC and Twin City Lines money counting

room employees, who years ago began separating out the tokens. It is unclear when the practice began, but given some of the ancient tokens in the collection, it appears to go back several decades.

Over 200 transit properties are represented, including Minneapolis, St. Paul, Duluth, Mankato, Brainerd, Crookston and Winona from Minnesota. It is not unusual to have more than one generation of token from the same city, as streetcars were replaced with privately owned buses, which in turn became publicly owned. Not surprisingly, MTM tokens showed up on the buses. MTC still uses the original Minneapolis Street Ry. and St. Paul City Ry. tokens that date from 1953 and before.

Mike Buck has mounted and framed the collection and it is on display at the Linden Hills Depot. As is his annual custom, he has rearranged the other depot displays, adding new material. Thanks to **Dennis Wachholz** of MTC for arranging the donation.

New postcards

A new single summer postcard and five pack are now on sale. The single card shows a two-car meet at the passing track through a tunnel of foliage. The five-pack features the pen and ink drawings of **Bob Lemm**. Readers will recognize one of the views from the cover of the Summer 1992 Minnegazette.



Looking through the ready barn toward the storage barn. If the ISTE A grant is approved, the space between the two barns will be enclosed. Aaron Isaacs photo.

Minnehaha Depot Open House a big success

The Depot's annual Open House was a tremendous success. The large turnout included Park Commissioners **Skip Gilbert** and **George Puzak** and **David Nystuen** from the Minnesota Historical Society. It was made possible by the local media, the Longfellow-Nokomis Messenger, the Highland Villager and the St. Paul Pioneer Press. Thanks to **Art Nettis** and **John Walker** for their help.

New to this year's open house was bus service. **Joel Gensler** brought out TCRT Mack #630 and took visitors on a variety of scenic trips along the nearby parkways. **Art Nettis** pitched in with the driving.

Thanks to **Corbin Kidder** for setting it all up and for the refreshments.

As always, the Minnehaha Depot needs volunteers. The upcoming Minnehaha Park restoration will attract more visitors. With additional volunteers, the depot could open on Saturdays and holidays. If you can volunteer, call Corbin at 227-5171.

RAILROAD DIVISION REPORT

-Richard Fish

Acquisitions

Minnesota Clay Company of Bloomington donated Minneapolis Northfield & Southern box car #408 to the museum this spring. The car is a 40-footer built in 1952. It took a little work to get it ready to move. **Ken Beck** cleaned and lubricated the brasses. **Dick Kasseth** and I changed the reporting marks and fixed a door that was off its track. It arrived at Osceola in June where it will serve as a tool car and static display.

Art Pew has donated his World War II Great Northern wood caboose, along with a 480 volt transformer and cabling for charging AMTRAK compatible batteries.

Restoration and maintenance

It was a typical spring at Jackson Street Roundhouse with many members showing up to get our equipment ready for the 1994 operating season. Several of our members from as far away as Winona



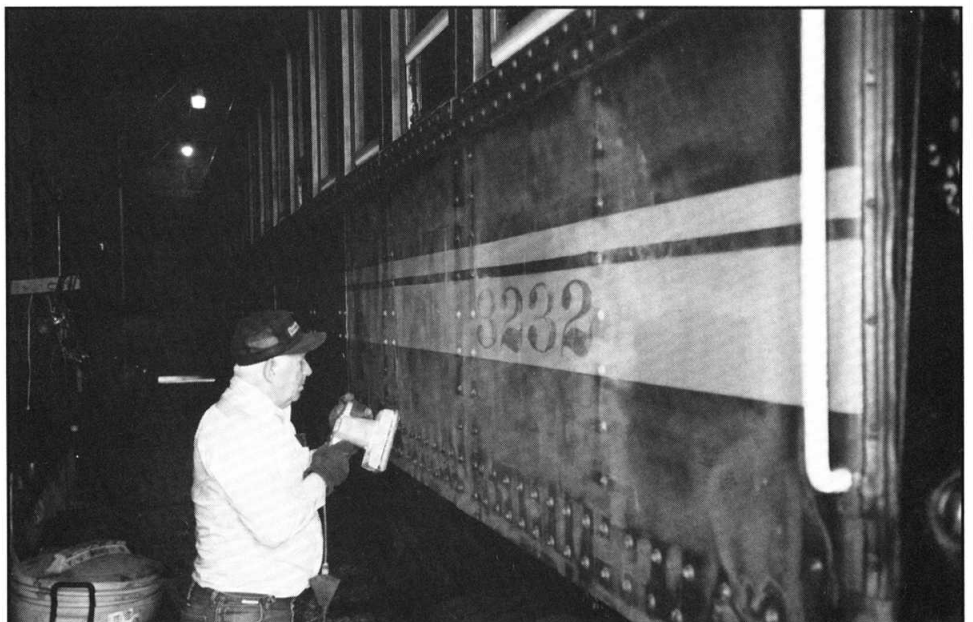
Diesel #102 is back, after several years out of service. Doubleheading with #105 during its shakedown trip it looked like something from the early BN merger days. Morten Jorgensen photo.

and Rochester were regular attendees.

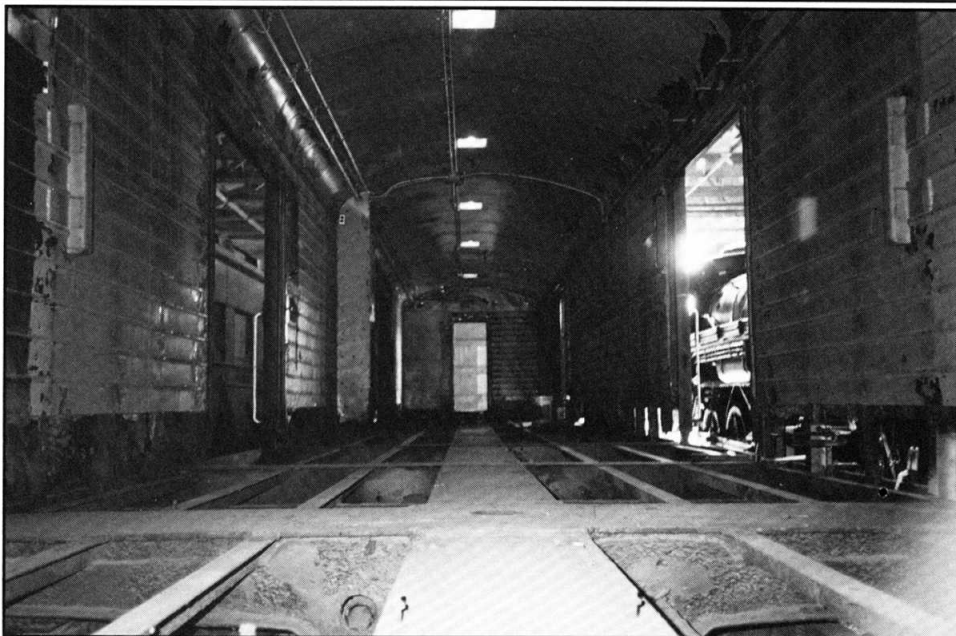
Steam engine #328 has been receiving the attention required to keep it in good operating condition. **Gary Bensman** was in town to do some repair work under the cab and make some adjustments to the suspension. The regular crew has included Steam Foreman **Ward Gilkerson**, **Keith Skeivik**, **Barry Moore** and **John Oliver**, with help from **Mike Schmitz**, **Noel Petit**, **Mike Mason**, **Dave Redding** and **Mike Alfveby**. **Steve Sandberg** and **Mike Schaefer** even showed up for a day after the 261's

excursion to southern Wisconsin. **George Bergh** headed up the project to sandblast and paint the inside of the tender tank and the coal bunker.

Up at Osceola a work group consisting of **John & Marcia Diers**, **Grace & Bernie Bjorklund** and **Steve Stocker** repainted part of the interior of Rock Island coach #2608. The same group, with help from **Bob Clark** and **Bob Sawyer**, are reconditioning Great Northern business car #A-11. It has received new carpeting, new interior paint, new and reconditioned furniture and fresh exterior paint. A



Harold Ellingson sands the exterior of Lackawanna coach #3232 (now #2232) to prepare it for painting. Aaron Isaacs photo.



GN baggage car #265 under repair at Jackson Street. (Above) The floor has been removed, along with much of the lower side sheeting. (Below) Many of the vertical members were rusted through. New metal is being welded in place.

Aaron Isaacs photos.



recent inspection found a thin flange on one wheel, so a visit to Northtown is needed. This will make a fine first class accommodation when it is complete. The plan is to run the A-11 regularly during September and October.

At Dresser, **Slim Yetter** has rebuilt the generator engine for GN coach #1213. On May 20th and 21st, **Bill & Bruce Pfannes** assisted by **Paul Dalleska**, **Paul Spyhalski** and myself installed batteries in the cars at Osceola. In addition, Bill engineered the installation of the #1213's generator using a floor jack, wood shims and a large front end loader. Unfortunately, it failed a short time later, and some

small components are being fixed at this time. Paul replaced all the locks on the equipment so one key fits all.

Rock Island coach #2604 received rebuilt trucks and a new Soo Line wine red paint job in May. It moved to Osceola in May with locomotive NP #105 for the opening week of operations. Many people helped with the truck rebuilding, including **Paul Dalleska**, **John Peters**, **Marv Mahre**, **George Bergh**, **Morten Jorgensen**, **Mike Hanson**, **Joe Fishbein**, **Dick Tubbesing**, **Burt Foster**, **Mike Matson** and myself. It was a lot of work, but the brakes are so tight now they barely release. Thanks to the Burlington Northern car crew under the super-vision of **Ray Moran** for

helping with truck swap.

In addition to the trucks, **Fred Soop** and **John Stein** repaired the interior lights, lubricated the end doors and touched up the interior paint. A lot of effort (and money) has gone into this car over the past year, but it really shows.

We've learned more about Lackawanna coach #3232. It was built in 1925 as steam hauled commuter coach #2232, and has been reassigned that number. With the electrification of the DL&W commuter service in 1932, it received a control cab at one end, although it remained an unpowered trailer.

It has really taken shape since we received it last summer from the Fremont & Elkhorn Valley. **Bob Flood** rebuilt the control end of the car and did a lot of steel repair work. **Dick Kasset** and **Eric Brom** redid the wiring so we can operate the car lighting at 32 volts DC. **Bill Graham** took charge of repainting the interior, a project started last fall by **Harold Ellingson**, **Ken Beck** and **Dan Fortin**. In addition, **Steve Collin** and **Beth Ottinger** spent a lot of time on the interior. The car was in usable condition when we got it, but it looked quite shabby. **Art Nettis** and **Wes Barris** replaced all the bad windows and Art obtained the glass shades for the lights. The pilot has been removed and the headlight rewired to serve as a red marker lamp. The car has a lavatory and it's getting a modern caboose toilet. We don't publicize on-train toilets, but they come in handy for passenger emergencies.

Larry Schulte's crew got locomotive NP #105 in good shape weeks before the start of the operating season. **Nick Modders** spent a day grooming the engine and it looks fine as always. **Paul Spyhalski** with help from **Noel Petit** and others got locomotive LST&T #102 ready to go to the BN for power assembly work. It arrived in Osceola in early June to serve as backup to #105. Paul has moved his greasy coveralls (I think he has a new pair) on to the 101, which we'll hopefully see running in the next year or so.

And the work continues. Scheduled for completion this summer are C&NW/GN coach #1097 and GN baggage car #265. DM&IR heavy-weight coach #30 and CB&Q streamlined coach #598 will be moved to

Jackson Street to begin restoration. We really want to get these projects started this year.

Mike Hanson is heading up a project to get CB&Q doodlebug #9735 back in condition so it can be moved from the Minnesota Commercial roundhouse, where MTM continues to pay rent. This project is being partially sponsored by the CB&Q Historical Society. Anyone interested in helping with this should call **Greg Koon** at 323-9500. In addition to physical help they need money. Send checks to MTM Doodlebug Fund, 4707 Lyndale Ave. N., Minneapolis MN 55430.

If you have a general interest in railroad restoration please call me at 729-8068. We've got a fine group to work with and many fringe benefits like fresh coffee and stories by **Tony Becker**.

JACKSON STREET REPORT

It looks hopeful that the Jackson Street Roundhouse will receive a \$261,200 ISTE A grant. When combined with the required 20 percent local match, the total funds available for the project will be \$326,500. It will be used to add track, ready the building for opening to the public and restore some equipment and exhibits for a short demonstration train ride.

\$26,500 will be spent to build a runaround track parallel to and just north of the "mainline", which runs alongside the pole building. The NP Rutledge depot will be restored and installed at a cost of \$33,500.

The flat open area east of the roundhouse, not used to date by the museum, will become a paved parking lot. A paved walkway will extend from the parking lot around the north side of the roundhouse, providing a panoramic view of BN and C&NW freight trains on the main line. It will be separated from BN property by a wrought iron fence, and will lead to the pole building, the depot and to open air display tracks. Some areas within the pole barn will be paved, both for visitors and for equipment maintenance. One of the old Great Northern light towers near the Jackson Street overpass will be restored to light the outdoor display area.

The grant includes \$52,500 for rolling stock restoration. There will be

a short demonstration train ride from the yard to Rice Street using trackage rights on the BN switch lead. NSP GE 45-tonner #5 will receive a new paint job and some cosmetic work. The open platform Milwaukee Road combine will be restored, along with the World War II GN wood caboose recently donated by **Art Pew**. These three pieces will be supplemented by whatever happens to be runnable at Jackson Street.

Finally, there will be some cosmetic restoration of static display equipment, such as the Russell snowplow. How much depends on how far the money goes.

OSCEOLA REPORT

-**Marcia Diers**

I've said it before, I'll say it again and again....."Its the people who show up each day and contribute their time, talent and hard work that makes the 'Ride' and the Railway a reality". By mid-June I'd received 103 volunteer registrations from MTM members indicating interest in working as train crew, passenger service volunteers and ticket agents on the OSCVRy this season. This article turns the spotlight on you. I'm concerned that there is never enough recognition in return for the hundreds of hours of time that we all contribute in such a variety of ways toward providing 'The Ride'. The following is the 94 list of member volunteers who make it all happen on the OSCVRy:

Mike Alfveby, Train Crew, Maint.
Duane Arnold, Passenger Services
Wes Barris, Train Crew, Maint.
Charles Barthold, Passenger Services
Kim Becker, Ticket Agent
Tony Becker, Train Crew
Debbie Beers, Train Crew
Richard Berg, Passenger Services
George Bergh, Jr-Train Crew, Maint.
Bernie Bjorklund, Pass. Servs. Maint.
Grace Bjorklund, Pass. Servs. Maint.
Mark Braun, Train Crew
Erik Brom, Train Crew
Bill Bruce, Train Crew
Wesley Carlson, Passenger Services
Bob Clark, Track Crew/Ry Board, Maint.
Connie Clark, Passenger Services
Mike Coffey, Passenger Services
Benn Coifman, Train Crew
John Coughlin, Passenger Services
Harold Dalland, Passenger Services

Paul Dalleska, Train Crew/Maint.
John Diers, Pass. Servs. Ry Board, Maint.
Marcia Diers, Pass. Servs./Mktg, Maint.
Blair Dollery, Passenger Services
Mary Lou Durand, Passenger Services
Jan Edstrom, Passenger Services
Harold Ellingson, Pass. Servs. Maint.
Richard Fish, Train Crew/Maint.
Joe Fishbein, Train Crew, Maint.
Dan Fortin, Pass. Servs./Maint.
Burt Foster, Train Crew/Maint.
Ward Gilkerson, Train Crew/Training, Maint.
Anna Gilkerson, Passenger Services
Linda Jensen Gordon, Pass. Services
Laurits Hansen, Train Crew
Jim Harrison, Passenger Services
Dick Heine, Passenger Services
Donna Heine, Passenger Services
Louis Hoffman, 1st Class Pass. Servs.
Peter Hoffman, Passenger Services
Aaron Isaacs, Passenger Services
George Isaacs, Passenger Services
Kate Isakson, Passenger Services
Paul Isakson, Passenger Services
Lloyd Jackson, RPO
Charles Jensen, Passenger Services
Mary Jensen, Passenger Services
Tom Jensen, Train Crew
Vickie Jensen, Pass. Servs./Train Crew
Morten Jorgensen, Trainmaster, Maint.
Jerome Kainz, Passenger Services
Richard Kasseth, Maintenance & Rest.
Norman Kerr, Passenger Services
Dave Kloes, Train Crew
Richard Kolter, Train Crew, Maint.
Larry Kytola, Passenger Services
Pat Kytola, Ticket Agent
Dwight Larson, Train Crew, Maint.
Ken Lear, Train Crew
De Smith Lindeen, Passenger Services
Tim Lutz, Pass. Servs., Maint. & Rest.
Marv Mahre, Train Crew, Maint.
Bill Marshall, RPO
Loren Martin, Passenger Services
Mike Matson, Train Crew/Pass. Servs., Maint.
Bob McNattin, Train Crew
Mike Miller, Passenger Services
Nick Modders., Train Crew, Maint.
Barry Moore, Train Crew, Maint.
Peter Moskop, Maintenance & Rest.
Marvin Nauman, Passenger Services
Tom Neadle, Passenger Services
Norm Nelson, Passenger Services
Art Nettis, Train Crew, Maint.
David Norman, Passenger Services
John Oliver, Train Crew/Maint.
Gary Ostrand, Train Crew
Christine Peterson, Passenger Services
Ralph Peterson, Train Crew
Noel Petit, Train Crew, Pass. Servs.
Art Pew, Train Crew, Ry Board, Pass. S.

Daniel Porwoll, Train Crew
David Redding, Train Crew/Maint.
Todd Rust, RR Supt./Train Crew/Maint.
Steve Sandberg, Train Crew/Maint.
Bonnie Sawyer, Group Reservations
Mike Schaefer, Train Crew/Maint.
John Schillberg, Pass. Serv./Historian
Mike Schmitz, Train Crew/Maint.
Larry Schultz, Train Crew/Maint.
Tracy Sherbert, Ticket Agent
Keith Skeivik, Train Crew/Maint.
Mary Smith, Passenger Services
Fred Soop, Train Crew/Maint.
Paul Spyhalski, Train Crew/Maint.
John Stein, Train Crew/Maint.
Steve Stocker, Depot Project/Ry Board
Richard Tubbesing, Train Crew/Maint.
Kevin Ullisnik, Train Crew
Lyle Vogt, Passenger Services
James Weist, RPO
Slim Yetter, Maintenance

The thing that keeps me going is working with and being supported by a great group of people. You can take a great deal of pride in what we are doing with the Railway. Best of all is the feedback from passengers. It's such a treat to see tots to seniors light up as the train pulls into the station. It's rewarding to overhear passengers leaving the train tell one another how much they learned and that they enjoyed it so much they will return and bring others. I have tremendous respect for the qualified train crew members who share their skills by mentoring and training other members. I'm feeling much better about the condition and appearance of the train and that adds to my pride in the whole operation, too.

By all indications the '94 operating season of the OSCVRy is going well and I'm looking forward to a busy Fall knowing that we've got the resources and people we need to do the job. *Thanks.*

Souvenir booklet for sale

When our visitors want to know more about the railroad in Osceola, they can now purchase "Whistling Down the Valley", a 32 page souvenir booklet. Written and edited by **Aaron Isaacs**, it adds new articles, photos and color covers to recycled material from past Minnegazettes. 4000 have been printed. They are being sold for \$5.00. Members can pick up a copy at the Osceola depot, on the train and at selected shops in Osceola. If successful, there are plans to produce a similar booklet for the Traction Division.

EXCELSIOR REPORT

Restoration update

The Minnehaha restoration is reaching the stage where progress is much easier to see. Although there is much left to do, the finished product seems within reach as never before.

Hull planking is proceeding in earnest, after a period of little activity. The nautical term for planking is spiling, and it means more than just nailing a board in place. In order for the boat to be watertight, each plank must be shaped precisely to the curve of the hull and must butt up flush against its neighbors. Shaping may require steaming the timber so it will bend. End to end joints must be staggered like shingles or bricks to prevent weak spots. The whole process takes planning, patience and care.

Before installation, the lengthwise edges of the planks must be trimmed at an angle, so that a V-notch is created where the planks meet. The notch will receive caulking before the hull is finished.

Two spiling crews are working simultaneously. The volunteers are **Steve Jesmer, Gene Partyka, Paul Massnick, Ross McGlasson, and Wes Bosch**. The work is exacting and there is a great deal of it. It may be one of the last tasks completed before the boat is launched.

All the large and heavy components in the cabin and below decks have been

installed. This includes the boiler, engine, fuel tanks, fresh water tanks, sewage tanks and the engine generator set, although much plumbing and wiring remains to be done. The steam fitters have been holding their own work sessions on Tuesdays. The crew includes **Jerry Anderson, John Anderson** (no relation), **Scott Nelson, Ewald Gustafson** and **John Moorhead**. They have completed the plumbing to the fuel and sewage tanks and are starting the high pressure pipe fitting to the engine and boiler.

The cabin is entirely framed in. The tongue and groove upper deck floor is down. **Don Cox** is securing it with 3000 screws. The boat has two large square side doors, where the public will enter and exit. Rolling steel overhead doors have been installed. They are extremely similar to the originals, pieces of which were found in the hull when it was raised.

A previously unreported piece of original hardware has been acquired. It is a streetcar boat hand pumped whistle which was mounted on the upper deck at the top of the stairway. An original air operated whistle used by the pilot could not be found, so one is being fabricated. Interestingly, the boats did not use a standard streetcar whistle, but opted for one with a deeper tone.

The stainless steel inner stack has been assembled for fit. It comes in two sections. The top one can be removed, hopefully to permit the



Here is one of the two side doorways to the cabin, with the rolling steel overhead doors installed. Note also the progress on the upper deck floor.



The Minnehaha's rudder has been restored and reinstalled, along with the refurbished prop from the Como. Aaron Isaacs photos.

Minnehaha to enter Crystal Bay and reach the Lafayette Club. An earlier Minnegazette reported that there would be a telescoping stack, but that idea has been abandoned. The stainless steel will be covered by a black steel false stack two feet in diameter, to give the proper appearance.

Volunteers are installing the steering mechanism. Here is another area where safety has caused a change. The original boat was manually steered by means of a continuous rope between the ship's wheel and the rudder. The restored boat will have hydraulic steering.

Dave Onan, Bob Woodburn and Jim Ogland are designing and installing the electrical system.

The refurbished prop from the Como is in place. **Stan Straley** has mounted the rudder, with assistance from **Doug Hultgren** and **Egon Anderson**.

The city fire marshall inspected the boat building recently and found nothing to criticize.

Excelsior trolley to receive ISTEAFunds

The final approvals are still pending, but it's likely that MTM's second trolley line will be built in 1995 with federal ISTEAFunds. The Metropolitan Council's Technical Advisory Committee has rated the Excelsior trolley number two among those projects applying for ISTEAFunds.

Enhancement funds.

38 projects worth \$13.7 million applied for a pot valued at about \$10 million. 32 of the projects have been recommended for funding. ISTEAFunds cover 80% of the cost, requiring a 20% local match. The Excelsior trolley finished third last year but wasn't funded because the pot was much smaller and because the James J. Hill Stone Arch bridge took most of the money.

Even though the trolley line idea has been around for about three years, many members may be unfamiliar with it. The basic idea is to recreate the experience of streetcars and express boats meeting and exchanging passengers at the Excelsior docks. Rather than run down the center of Water Street, as they used to (see page 23), the trolley line will follow the former right of way of the Minneapolis & St. Louis from its crossing of Water Street to a site just east of the original docks.

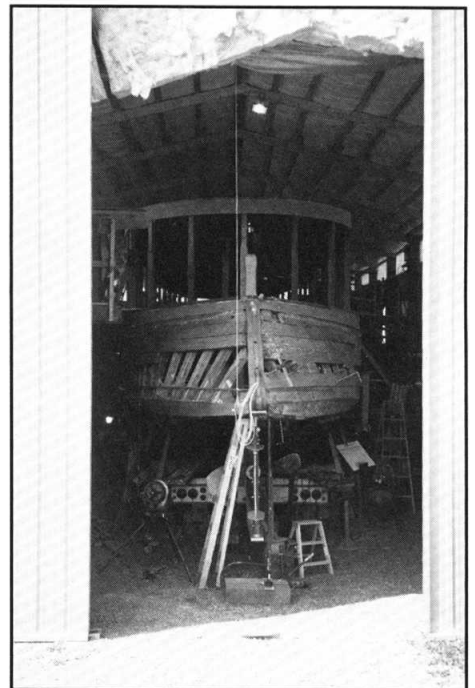
The right of way is now owned by Hennepin County, whose Regional Railroad Authority has approved the trolley line running alongside the existing bike trail. This stretch was double track in its day, so there is adequate room for both uses.

Much groundwork has been laid for the start of construction. An engineering plan for the track has been completed. A supply of overhead wire poles and crossties is on hand. A contractor has been lined up to build the DC power supply.

The hardest job has been to find a streetcar—actually, to find a set of motorized streetcar trucks. The bane of all trolley museums is too many restorable car bodies and too few trucks. MTM already owns four TCRT streetcar bodies. Work began several years ago on #1239 at Jackson Street, but the project stalled and the car remains in a largely disassembled state. It is currently the favored restoration candidate, because it can be returned to its original gate car configuration. Nothing but gate cars ever ran in Lake Minnetonka service.

So we have bodies, but trucks are the problem. There are several options. MTM purchased a former Chicago L car as a parts robber. It has one powered and one unpowered truck. The powered truck has a longer wheelbase than the unpowered truck. It may or may not fit under a Twin City car. If it does, the unequal wheel bases may look funny. The unpowered truck is the same as the two under #265. Each received a single motor from steeplecab locomotive #20 that used to switch the main steam plant.

Leo Meloche has contacted every conceivable source, including some in Japan. Motorized trucks of the right size are generally unavailable, although the Japanese contact may yield something. A more expensive option is to hire someone to build



The Minnehaha's finished profile has emerged with the recent cabin framing.

RECENT STEAMBOAT FUND DONORS

The 3rd Annual Lafayette Club fundraiser was a sellout, clearing over \$30,000 after expenses. The following people made contributions recently. Our thanks to them all.

Allen, Harold, P.
Allen, Harry
Allen, Kenneth & Barbara
Anderson, Paul & Dorothy
Andrews, Charles & Jane
Antoine, Margaret & Ronald
Arnold, Jack A.
Atwood, Harry & Margaret
Bellomo, Brett & Lona
Boote, Marvin & Hazel
Britzius, Charles & Bernice
Brooks, Horton & Bernice
Bruncheon, John
Burnett Realty
Capon, Joan & Gary
Cargill, James R. II
Casey, Donald & Ardys
Chute, Fred H.
Comstock, Jack Arnold & Rebecca
Comstock, Rebecca
Creedy, Mike & Kendra
Crosby, Mrs. Thomas N. Sr.
D'Agostino, James
Dayton, Wallace C.
Dovolis, Mary J.
Doyle, Sheila
Ehlert, John A.
Engelsma, Daniel
Erlandson, John & Barbara
Fayfield, Robert W.
First Bank National Assn.
First State Bank of Excelsior
First Bank Wayzata
Fish, James S.
Fox, Bill & Katherine
Frick, Mrs. & Mrs. Robert B.
Gillespie, William B.
Griffen, John J.
Gustafson, Ewald & Miriam

Hendrickson, Stephen
Henley, William & Shirley
Honeywell Corporation
Huber Funeral Homes
IBM Corporation
Investors Bank
Johnson, Sankey A.
Jones, Jane A.
Juliar, Terry & Nadine
Jundt, Marcus & Charlene
Kammen, Melvin & Margaret
Kratsch, Donald H
Lindsey, Danial T.
Lindstrom, Christine
Lowry, Mrs. Goodrich
Lutheran Brotherhood
McCarthy, J. J.
MacCormack, Larry & Bonnie
March, Steven C.
Marcotte, John
Mason, Herb
Metropolitan Bank
Michael, Paul S.
Michelson, Robert L.
Minnetonka-Plymouth Rotary
Morrison, Clinton
Mortenson, Dr. Elmer
Murphy, Kingsley Jr.
Naas, Robert L.
Nachtigal, W.E. Jr.
Nagel, John & Renee
Nelson, Earl & Lila
Nelson, Glen & Marilyn
Nelson, Larry H.
Northern States Power Co.
Norwest Banks
Okey, Diane
Olson, Doloris
Orono Lions Club

Owen, David Sherwood
Owen, Mrs. Kenneth
Phelps, Gene
Phelps, Ned
Pillsbury, John & Katherine
Pillsbury, John S., Jr.
Pillsbury, Phillip W. Jr.
Piper, George F.
Planer, Rebecca
Plowman, Larry & Diane
Rappaport, Gary & Susan
Rauschendorfer, J & S
Rendahl, Tom & Lynne
Rettinger Bros. Oil Co.
Saulon, Joseph & Gloria
Seifert Milton H. Jr. .M.D.
Senior, John & Patricia
Sheldon, Edith S.
Slattery, W.D. & Joan
Stevens, Ruth Bovey
Sween, Earl & Shirley
Taylor, Howard & Lorraine
The Martin Foundation
Torkelson, Robert & Ardella
Traff, Thomas & Jan
Trubeck, William & Judith
Tuttle, Gedney
Velie, Vincent S.
Vest Landen Torsk Klubben
VFW, George Wolff Post #25
Walzer, R. J.
Weber, Mr. & Mrs. M. V. Sr.
Williams, David S.
Wlitzlo, Bill
Wolfs Pharmacy
Women's Club of Minnetonka
Woodburn, Delma
Wyman, James & Elizabeth.

trucks from scratch. This has been done a couple of times with Birney trucks.

A temporary solution presented itself in the form of four modern, gas powered trolley replicas offered for sale by Valleyfair amusement park. The cars are single truckers, designed to look like 1890's vintage. They might fool the lay person, but are clearly not historically accurate. Meloche won them with a \$7500 bid, beating out the Minnesota Zephyr, the only other bidder. MTM turned around and sold two of them to the Zephyr for \$10,000. On Memorial Day weekend, the Zephyr began a

shuttle service from its depot on the north end of Stillwater to the Freight House restaurant using BN trackage.

Fund raising and media

As the boxed list of benefactors shows, the Steamboat Fund has received an unprecedented number of donations lately. The third annual Lafayette Club fundraiser was a sellout. It cleared \$30,000 after expenses.

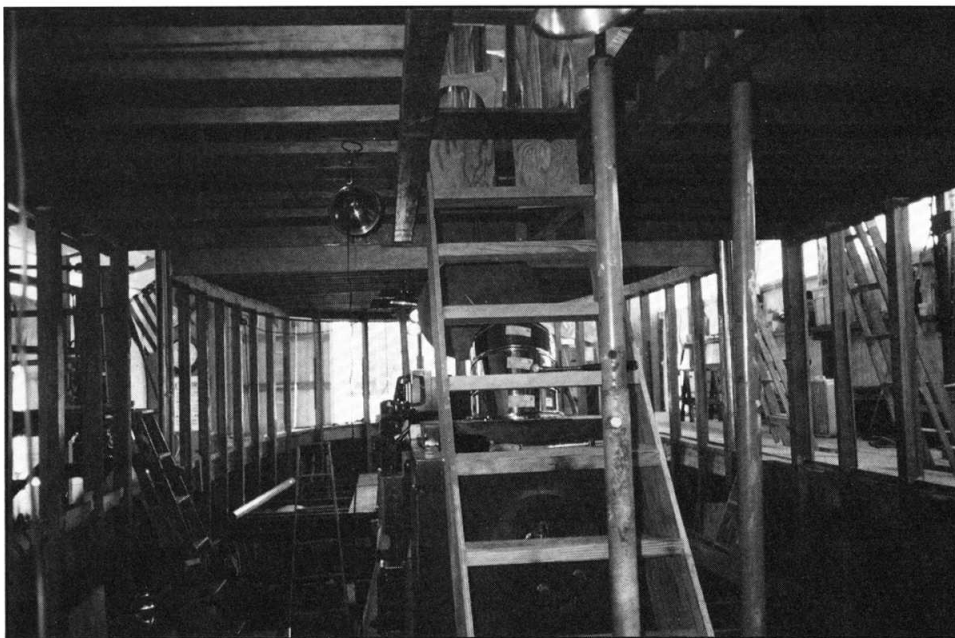
As with previous fundraisers, there was a silent auction where donated items were sold to raise money. Notable among the items was a scale model of the Minnehaha by professional model

builder **James D'Agostino**. Though unfinished, it sold for \$4000.

The June issue of Minneapolis-St. Paul magazine carried a half page story on the Minnehaha restoration.

Rowboat donated

A beautiful sixteen foot, wine glass stern, cedar lap strake rowboat has been donated by **Tom and Nina Carpenter**. Built by Moore Boatworks at the turn of the century, it is in excellent condition with the original varnish finish intact. The seatbacks for ladies, are still with the boat.



Inside the cabin looking toward the stern, showing the upper deck stairway ahead of the boiler. Aaron Isaacs photo.

ISTEA PAYS OFF BIG FOR MTM

The Intermodal Surface Transportation Efficiency Act (ISTEA) has revolutionized the funding of transportation history projects. This year the State of Minnesota designated \$10 million for "enhancement" projects, many with an historic slant. Much of last year's money went to reopen the James J.

Hill Stone Arch, crowding out other projects.

This year none of the 38 applications exceeded \$500,000. 32 have been recommended for funding by the evaluation committee. Included are three from MTM.

a. \$312,800 to build the Excelsior streetcar line to feed the steamboat Minnehaha (see Steamboat Report).

b. \$120,000 to expand Como-Harriet car barn capacity and make other fixed plant improvements (see Traction Report).

c. \$261,200 for improvements to Jackson Street Roundhouse (See Jackson Street Report).

Out of the 38 application, the Excelsior trolley was rated number two with 822 points, the Como-Harriet improvements were rated number 17 with 696 points and Jackson Street came in at number 25 with 644 points.

The three projects together total \$694,000, and represents 6.9% of the state's enhancement money. To put that in further perspective, it is roughly twice MTM's 1994 budget.

Other projects of interest that will receive funding include:

The Lost Lake Canal in Mound will be redredged after being largely blocked for decades. The streetcar boats used it to reach downtown Mound and the GN depot.

The Milwaukee Road depot in Minneapolis will receive \$500,000 for repairs, including reactivation of the tower clock and restoration of the tower's neon railroad name signs. There is \$488,000 for work on the freight station headhouse next door. The latter grant is ironic, since the city razed most of the freight house a couple of years ago.

Trail funding has been recommended for the following abandoned railroads:

1. Minneapolis & St. Louis from Lake Street to downtown Minneapolis.
2. Northern Pacific Scally Line from St. Paul to Hugo.
3. Milwaukee Road from Lilydale through Mendota to Eagan.
4. A Milwaukee Road industrial spur in Hastings.

This round of funding covers the years 1995-97. As this is written, some time remains before the Metropolitan Council will give its final approval to the projects.



One of the four Valleyfair trolleys acquired by the Steamboat Division. Two have since been sold to the Minnesota Zephyr. A canvas roof is stretched over the metal frame. Leo Meloche photo.



#X90 at Shoreham. Soo Line photo, Minnesota Historical Society collection.

RESTORATION ON A SHOE STRING

The saga of the 321/X-90

-Larry Bohn

Editor's note: Many older readers will remember the Soo Line's Shoreham shop goat, 0-6-OT #X-90. It sat derelict and visible from Central Avenue for years after the demise of Soo steam. Then it disappeared, only to resurface in Manitowoc, WI as tender engine #321. For the last 28 years, Larry Bohn has worked to bring the old engine back. This is a story of how dedication and resourcefulness made a difference.

I first became aware that there was a steam locomotive available to a "worthy organization" from a photo in the Milwaukee Journal of Nov. 23, 1966. The caption stated that the Miller Compressing Company of Milwaukee was looking for a home for the Soo Line X-90, which was in their possession.

I have always been a steam locomotive enthusiast, and because Manitowoc did not have a steamer on display, I decided to see if I could obtain it for the city. I first called the Mayor to see if he felt that there was a

place in the city for displaying the X-90. His answer was rather vague but led me to believe that I couldn't count on much help from that direction. I next called the director of our local museum to see if there was a chance that they might like a locomotive displayed on their front lawn. Although his answer was also negative, he did suggest that I get in touch with officials of the Manitowoc County Historical Society. After probing around the telephone book for a while I was finally able to reach the president of the organization. Upon explaining the situation to her, she told me that the society was making plans for a historical village and that not only would the locomotive be a fine addition to the village but might possibly speed up the process of securing a plot for the location of the village.

In the meantime I did a bit of research to try to pin down the X-90 historically speaking. Both the style and number reminded me a lot of an engine that I had photographed at the Soo Line's Shoreham shops in Minneapolis during the summer of 1959. Upon checking my photo files, I found that indeed, it was the same engine. A book on the Soo Line by Leslie Suprey indicated that the engine was built in December 1887 by the Rhode Island Locomotive company of Providence, RI, as #38 of

the Minneapolis, Sault Ste. Marie and Atlantic, but was renumbered to #321 of the reorganized Minneapolis, St. Paul, and Sault Ste. Marie. It was the first six wheel switcher owned by that road. In 1932, the 321 was rebuilt as a side tank switcher with a coal bunker on the fireman's side of the cab and was assigned to "shop goat" duty at Shoreham, replacing a 2-6-4T Forney engine. Shortly after assuming these duties, it was renumbered to X-90.

Hard to get

Armed with this information, I called Miller Compressing Co. and was connected with Robert Miller, the head of the firm. I found out that the engine did not yet have a home and that if we put in a request in writing, we would be considered along with any others. Apparently, my knowledge of the background of the X-90 impressed Mr. Miller as he asked if it would be possible for me to come to Milwaukee and make an evaluation of the engine's historical value, condition, etc. Of course I readily agreed and within a couple of weeks appeared, along with a few interested friends, at the Miller Compressing Company office.

We found that the engine was missing most of the readily remov-

able parts including: air compressor, bell and bracket, main rod brasses, (both crank and wrist pin ends), safety valves, smoke box cleanout cover, whistle, and cab roof ladder to name the most obvious. The backhead had also been stripped of anything resembling brass including: steam and air pressure gauges, water glass, injectors, lubricator, engine brake handle and valve stem, train brake handle, and try cocks.

Although the X-90 as rebuilt in 1932 had no need for a tender, the Miller compressing company had obtained a slope backed tender to go along with it. It was originally from a Wisconsin Central 0-6-0 of the 2300 series built by Brooks, year unknown. Although slightly larger than that originally on the 321 and about 30 years younger, it was as good a match as could be obtained at that time.

The tender was basically intact but was fitted with a front coupler for work train service. The end sills were severely rotted and the back footboard brackets were badly bent but otherwise it was ready to go. There now was nothing to do but wait and have a course of action ready to go if things went our way.

The MCHS had virtually no money available for shipping the X-90 to Manitowoc, so it became necessary to decide on the most feasible method if we should be lucky enough to get it.

The simplest method would be to tow it up via C&NW. We were reluctant to do this as it would involve a special slow train with the engine and tender towed as bad order equipment behind the caboose. The National Railroad Museum of Green Bay had had disastrous results with this method when moving their Sumter and Choctaw 2-8-2. Speed restrictions were ignored and all bearings and journals, both main and rod, were damaged to the point that major journal machining and completely new bearing brasses would be required to put it into running order.

The method used by Miller Compressing Co. in bringing the X-90 and tender from Minneapolis to Milwaukee seemed to be the safest, but the cost of shipping on flat cars, including loading at Milwaukee and unloading at Manitowoc, was far beyond anything we could handle.

The dilemma was solved by Art

Hansen, a member of the Clipper City Model Railroad Club, who noted that the Miller Compressing Co. was within a half mile or so of the Chesapeake and Ohio train ferry docks. The C&O ran ferry service between Milwaukee and Ludington, MI, and also between Ludington and Manitowoc. The logical way of getting the X-90 to Manitowoc would be via Ludington. Total movement on wheels would be no more than a couple of miles, all at switching speed.

A few months later, Michael Dodge, a machinist at Manitowoc Engineering Co., brought me some useful news. The Detroit Toledo & Ironton was having Manitowoc Engineering convert a steam wrecking crane to a diesel power unit. As the wrecking crane had itself been in a wreck, the boiler and appliances were being scrapped out. A quick phone call got us permission to salvage whatever we could before actual scrapping took place. When we were finished, we had: a 9" single stage Westinghouse air compressor (exactly like the one on X-90), a dynamo, a water sight glass, three try cocks, two small injectors, a safety valve, a two feed Detroit lubricator, and two air reservoirs.

Acquisition of these parts gave us an excuse to contact Mr. Miller again. We sent a photo of the parts so that he could see that we were actively working on getting the engine. We also told him that whoever got the X-90 should be notified that we could help them with replacement parts as they would certainly be of no value to us without an engine to put them on. We heard nothing from Miller but assumed that "No news was good news."

A year after our first inquiry, the anniversary gave us another excuse to contact Mr. Miller. We hadn't had any answer from our previous letter, so we decided to set up an appointment to see him personally. A couple of weeks later, we were again at the Miller Compressing Company office.

We learned that he had received inquiries about the X-90 from only two groups other than us. One was the National Railroad Museum at Green Bay and the other was the Mid-Continent Railway Historical Society at North Freedom. We felt that we didn't stand much of a chance of getting it as we didn't have the "horsepower" that either of the other groups had. When we asked him what our chances were, he replied "Not much", but not for the

reasons we expected. It seemed that he did not want to give the engine to any group not located in Milwaukee as he was primarily interested in the publicity value of the gift. Publicity in Manitowoc would not help his firm in the least. After he told us that he appreciated our interest but..., we found ourselves on the way home, no further ahead than before.

During the following year, I spent quite a bit of time doing more research on the engine. Charles E. Fisher of the Railway & Locomotive Historical Society informed me that the construction number was #1877. A photo of a sister engine, #325, was obtained from the Harold K. Vollrath collection. I was a locomotive builders plate buff and started swapping copies of builders plates cast in aluminum in our high school foundry class from originals that I owned, for copies of plates owned by others. I hoped I could eventually come across a Rhode Island plate to copy. I finally found a lead from Stan Mailer, who had seen some Rhode Island plates hanging on the engine house wall at the Saltville, VA plant of Olin-Mathison Chemical Co.

A letter to Olin-Mathison brought a quick return with, "I'm sorry but the plates were sold to one of our engineers who is no longer with us."

Another letter produced the name and forwarding address of the engineer, who was living near a town in Pennsylvania with the unlikely name of Eighty-Four.

After a month or so of negotiations, the Rhode Island plate, C/N 3030 of 1894 was in my possession. Comparison with the photo of the #325 showed that the plate was indeed correct so copies were made and the C/N and date removed and new ones added to conform to the 321. Finally brass copies were cast and polished up to fit the engine "when and if ..."

The second anniversary of the original inquiry seemed like another good time to contact Mr. Miller. I had an opportunity to look the X-90 over between meetings at the annual Wisconsin teachers convention held at Milwaukee in early November. What I saw didn't look good. Since the last time that I had checked it, the engine had been moved. The valve rods which had been lying on the ground next to it had not been moved with it. Checking at the

original location failed to turn them up. Also, during that time the sand dome cover had disappeared. In general the engine looked to be in much poorer shape with more rust and rot showing in all of the problem spots. My next letter to Mr. Miller outlined these points and ended by saying that although we still wanted the X-90 very much, I felt that it was much more important to have the engine be saved by someone rather than waiting for it to become worthless.

One morning in mid-December, I was summoned from metals class to take a phone call. It was from Mr. Miller and was very short and to the point. As close as I can recall, he said, "The engine is yours. Come and get it." He then let me know that he wanted it out of his yard before the 31st so he could write it off on the current year.

Move it or lose it

As soon as I could get away from school, I went to the C&O carferry office armed with my file on the X-90 to have a talk with **Lloyd Olson**, the agent. I explained our idea of moving the engine via the ferry system and asked if he thought that it could be done. After getting pertinent data on clearances, weight, etc, he asked "for a couple of days to work on it."

A few days later I got a call from Mr. Olson asking me to stop in at his office when I could. Obviously, that brought me to his door in about six minutes. He told me that if we could get it to the C&O yard in Milwaukee, He would be happy to deliver it to the C&O yard in Manitowoc. In that the historical society's operating budget was almost nonexistent, I then asked him the all important question. "How much is this going to cost us?" His answer, delivered with a big smile was "No charge!"

When we went to Milwaukee to take delivery, we assumed that we would be able to move it from Miller's yard to the C&O docks by going to the C&NW depot in Milwaukee and asking them for a price quote. Unfortunately, we got no cooperation from anyone in the depot. The people we talked to were not willing to make a quote on the move nor would they even agree that the engine could be moved over their

trackage, citing all sorts of rules and regulations as to why the move might not be able to be made. They stated that an inspection of the engine and tender would have to be made but gave us no help in locating a person who could do it. After about an hour of frustration, we decided to give up for the time being as we were due at the Miller yard so the local newspaper photographer could record the transaction for posterity. After the photos were taken, Mr. Miller suggested to us that if there was any scrap in the yard that would help us restore the X-90, we should feel free to take it along. Because all of the brass accessories were missing, scrap brass was our biggest need. We collected about 300 pounds of high grade red brass and hid it in the firebox because we felt that it might disappear if we left it in sight in the tender.

The yard workers at Miller's were quite pleased to see the engine go. They had been dreading the job of cutting it up for scrap. When I confided to one of them that I didn't know just how I was going to get it out of their yard and over to the C&O docks, he said that he would see what he could do.

A couple of minutes later, when a North Western switcher went by on the tracks alongside the scrap yard, he gave off with a piercing whistle which got the attention of the engineer who immediately stopped. "Hey Fellas!" the yard worker shouted. "How about taking this stuff over to the C&O docks for us?" "Sure thing," said the engineer and in less than ten minutes, the engine and tender were sitting on the ready track for the next ferry load. All that was left to do was wait for it to be delivered to Manitowoc.

In the meantime, I needed to locate a spot to store the engine in Manitowoc, as a location for the "Historical Village" had not yet been secured. I assumed that as long as the X-90 was a Soo Line engine, we might be able to use the end of one of the Soo Line yard tracks for this purpose. However, the Soo Line informed us that they had no spot available for storage in Manitowoc.

I then tried the C&NW. **Rod Hoard**, the depot agent, gave me a list of all of the private spurs on North Western trackage and suggested which ones might be the most logical to try. While attempting to contact the appropriate people, I suddenly realized that the North Western had empty stalls in the Manitowoc roundhouse. I called Mr.

Hoard back to see if he felt that I would be out of line in contacting the roundhouse foreman. He said that we would get better results if he did the necessary convincing. We were very happy to let him and apparently it didn't take much. The roundhouse foreman, **Lloyd Martin**, said in effect, Gee I miss the old steamers. It would be great to have one in the roundhouse.

On December 28, 1967, the X-90 and tender were loaded onto the C&O carferry "Badger" for shipment to Ludington, where they were transferred onto the Manitowoc-bound "City of Midland".

It took some time for the red tape to clear the C&NW main office to allow us to use their roundhouse, so for a time not much restoration happened. We did manage to bring the main rods out of the cold and into the Lincoln High School metals shop for general clean up. We discovered during the process that a main rod is a prodigious load for the trunk of a 1960 Plymouth Valiant.

During the move from Milwaukee to Manitowoc, the front end sill on the tender, which was very badly rotted, finally gave up the ghost. By the time the engine and tender were unloaded at Manitowoc, the front tender coupler was hanging from the bolts with no end sill between the coupler and the tender frame. A chain had to be rigged between the rear coupler of the engine and the original drawbar socket of the tender in order to make it movable and the front tender coupler had to be wired up to keep it from fouling switches while being moved.

After the red tape had been cleared, the engine and tender were towed up the hill from the lake front to the roundhouse. It was placed in stall #3 of the eight stall engine house, with two empty stalls on the right side and the stall on the left containing only a speeder and trailer and a small pile of bagged rock salt for keeping switch points clear of ice. This gave us all of the room we needed to do any work required, regardless of what proved necessary.

Excavating the locomotive

After initial tries at removing grease and grime by chipping, it became apparent that sand blasting was the only approach. A sand blasting tank

was built for us by **Joe Kaufman**, a local antique auto restoration expert whose main specialty is restoring Dusenbergs. He also donated all of the compressed air hose and armored sand blasting hose that we might need along with a nozzle.

The North Western normally had a switcher idling at the roundhouse every night between 6:30 and midnight, and they agreed to spot it just outside our stall so that we could tap into the brake system for compressed air to run the sand blaster. They also furnished us with a glad hand for our air line for easy connection and showed us how to set the regulator for higher pressure while we were blasting. In turn, they used the X-90 and tender as a source of coupler knuckles and pins whenever they ran short, replacing them as soon as a new supply became available. We never knew when we came in for an evening's work just how many couplers would be intact.

Sand for blasting was available free for the taking from the Hersite Chemical Corporation's sand blasting facility where tank cars were blasted inside prior to relining the tanks to carry caustic materials. The used sand was not ideal for blasting as much of it was broken up into dust. This made for unusually dirty sand blasting conditions but the price was right. Even with face masks, this job was terribly dusty and those who sand blasted usually had a bad case of "black handkerchief" for several days following an evening's work. About the only cost involved in sand blasting was for light bulbs. In order to see what we were doing, we had to rig trouble lights in fairly close to eliminate shadows. If the stream from the sand blaster inadvertently went across a light bulb even for a split second, the bulb would blow. After a couple of nights of having to quit early because of lack of light, we finally learned to bring a supply with us every night. The problem was at least partially solved later on when the large weatherproof flood-lights that lit the Lincoln High athletic fields at night were replaced with mercury vapor lights. They sealed from any entry of blasting sand. They were bright enough so that usually a couple could be placed well away from the action, so that the light came from two directions. This gave better

light than a half dozen drop cords. Occasionally, the problem still persisted when quarters were so close (between the frames, etc.) that the big floods wouldn't fit and we had to return to the drop cords.

Even with the sand blaster, progress was painfully slow. Grime ranged from a quarter inch to five inches thick and was resilient enough to be very stubborn. A few square feet a night was all we could hope to accomplish. We were very thankful that we were working on a little 0-6-0 instead of a "Big Boy". The final phase of each night's work was to paint the newly cleaned area with Rustoleum Damp Proof Primer furnished free of charge by a local auto parts store. This work proceeded very gradually over the period of a year and a half with the seasonal temperatures ranging from too hot to way too cold. Even though the engine was inside the roundhouse, the only heat in the building was in the locker room. The stall doors were left open, so twenty below outside meant 20 below inside. Even with long johns and insulated coveralls, we could not have worked without frequent trips to the locker room. One bitter cold night, while using a flame cutting torch in an attempt to break loose a rust-frozen sanding valve inside the sand dome, I suddenly realized that it really wasn't that cold. In fact, I was quite comfortable. Shortly thereafter I discovered that I had set fire to the leg of my coveralls and they were gradually burning off me. Whenever possible, to get out of the weather and the sand blasting dust, parts were removed and taken to the Lincoln shops for cleaning. It worked out very well as some of the kids who had no real interest in working on the required projects took a great interest in cleaning up and painting the eccentrics, links and the rockers for shifting the links.

The makeover

Before real restoration work went very far, a decision had to be made as to just how the locomotive was going to be restored. The easiest method would have been to merely clean it up and repaint it to represent it as the shop goat that it was. Because the engine was to be displayed in our 1890 vintage Historical Village, a shop goat would be totally inappropriate for the display. For that matter, a switcher

wasn't exactly appropriate for our needs but one couldn't be choosy about what one got, especially at the price we got it for. By that time we had found a photo of the 321 in the collection of **Bruce Miller**, of Hubertus, WI. It had been taken when the engine was relatively new, probably pre-1900 since the coupler knuckle was slotted and had a hole for adapting it to link and pin couplers. The photo revealed a number of differences between it and the later engines of the series and was clear enough to enable us to be very accurate in our restoration. Those facts and not wanting to waste the tender made us decide to "go for broke" and aim for a pre-turn of the century restoration.

Even so, there were still several other points that made the engine less than perfect for our display. First, the 321 had never operated in the state to say nothing of our local area. Second, the Soo Line itself had nothing to do with the Manitowoc area until 1909 when it absorbed the Wisconsin Central Railroad. Third, the only railroad in operation in Manitowoc when the 321 was built and up to the mid 1890's was the Milwaukee Lakeshore & Western. Finally, we were unable to find out just what the standard Rhode Island paint job was for a perfect restoration.

Our research had, however turned up the following points:

1. The color scheme for a specific batch of engines delivered to the Wisconsin Central by Baldwin.
2. The fact that the Wisconsin Central never had a Rhode Island built engine on its roster.
3. The Milwaukee, Lake Shore, & Western had a large number of Rhode Island engines, with construction numbers within just a few of the 321. Most likely they were both on the erecting floor at Providence at the same time.

Considering this, it was decided that we would make the engine represent all of the railroads serving Manitowoc. Therefore the 321 would keep its Soo Line number. It would be lettered for MLS&W. The paint job would match that of the Wisconsin Central's Baldwins. The tender would be left as is except for back dating the Soo Line emblem by adding a "string to hang the banner on" on top of it.

The first things that had to go were the side tanks. Once removed, the tanks, along with other scrap generated from the rebuilding, was picked up by the local scrap yard in exchange for oxygen and acetylene for any cutting or heating that we had to do.

The steel sheathed cab also had to be removed as it was not even remotely similar to the original on the 321. During the removal, we discovered that the X-90 cab was about 10 inches longer than the cab on the 321. It was mounted on a ten inch extension of the rear frame which, of course, also had to be removed with a cutting torch.

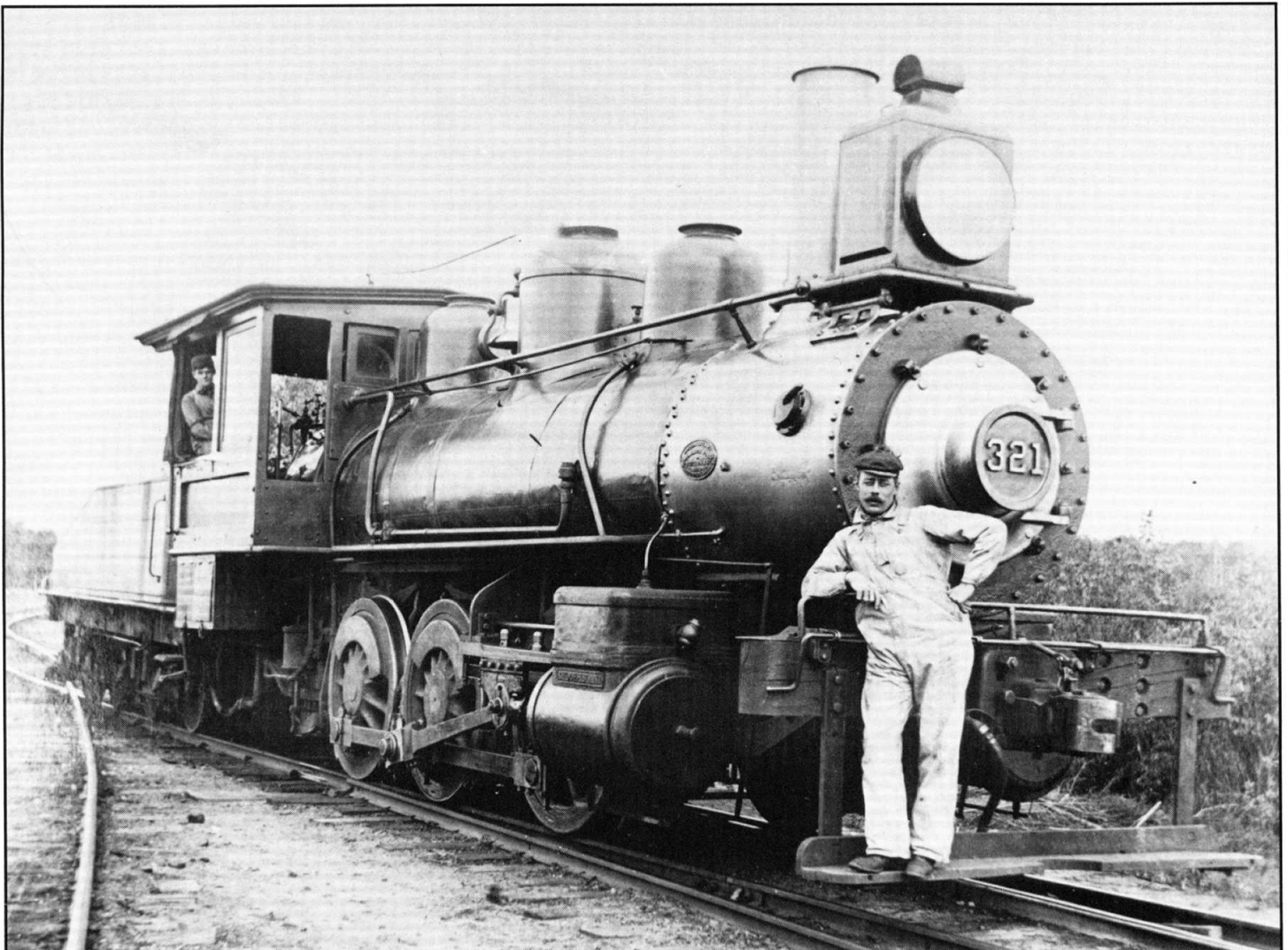
The removal of the cab also brought another fact to light. The rear frame cross tie, a heavy steel casting, had been badly broken during some previous mishap. Although it had been bolted back together with heavy

straps and bolts, the socket for the front end of the drawbar was almost completely gone, making it impossible to pull a tender and string of cars. Could this have been the reason that the 321 was converted into a shop goat with a coupler in back? We're still hunting for an answer to that one. Further checking around the engine showed that portions of the left side engine were not original, with many of the parts numbered for the 323 and 324. The cylinder head covers, cross head, cross head guide and main rod were the most obvious parts from other engines but it was also evident that the wheel center at the main rod crank pin had been cracked and repaired with a heavy steel strap forged around the wheel center and crank boss. These repairs indicated that at some time or other, the engine had been involved in some serious accident, probably a side swipe.

Bruce Miller had heard that the X-90 had fallen into a turntable pit at some undetermined time but we were unable to get verification on this from any other source. If this were true, it would account for the broken rear frame cross tie, but not the left side damage unless it also rolled over while falling into the pit. We'll probably never find out.

"Necessity is the mother of ..."

A new wooden cab was fabricated out of white oak purchased for \$60 from a local farmer. Complete blueprints were made from the photo and are most likely within a half inch of the original in all dimensions. The cab was prefabricated in the Lincoln wood and metal shops, then disassembled and mounted on the engine. All bolts for fastening it together were furnished free of charge



Soo Line #321 as delivered in 1887 (above) and as restored to date (right) at Pinecrest Village in Manitowoc, WI. Both Larry Bohn collection.



by the J. J. Stangel hardware distributors. The cab roof was made from tongue and groove fir flooring that was modified by V-grooving the lower edges so that it would at least approximate the sheathing used during the 1870's and 80's.

One of the simpler jobs in concept proved to be quite difficult in execution. This involved the smoke stack. The original stack of the 321 had been replaced with a taller stack which had eventually been either broken out or oxidized through on the top front edge. It had been patched and another extension had been added to the top. Apparently draft was a problem for an engine that sat idle as much as a shop goat. The extension had been lost in the transfer to the scrap yard and the patch on the broken top was missing. Upon checking the proportions of the stack on the photo it was plain that we could cut the broken part off and still have plenty of height to make the stack look right by welding a rim around the top.

The rim needed to be made of 1-1/4" half round bar which was unavailable to us from our normal supply sources and was beyond our

ability to roll into a hoop to fit the stack top. I presented the problem to Becker's Ornamental Iron Works, a local facility specializing in porch railings and other decorative metal work. They agreed to procure the necessary material and roll it into a hoop of the proper dimensions for the stack rim at no charge.

The difficult part lay in cutting off the broken top. We assumed that it could be easily cut off with a flame cutting torch. This proved not to be the case. Because of all of the oxides that had penetrated the surface of the hot stack over the previous 35 or more years, the cutting torch made no impression whatever on it. In the final analysis, the only feasible route to go was the hand hack saw. Even then, the metal was so hard that a blade would last two inches of the cut at the most. Luckily, the metal shop had at that time a large supply of hand hack saw blades that had been purchased for a ridiculously small sum through U.S. government surplus. The cost in "elbow grease" however was not so low. Total cutting time for the stack was close to eight hours spread over about three weeks.

While this was going on, there were many minor projects being worked on also. The photo of 321 was clear enough to plainly indicate that the builders plates that we had already fabricated were not correct. The 1894 plates we had copied had the construction number of the engine in one and a half inch numbers cast in the center of the plate. The plate on the 321 had no construction number showing. This time the problem of finding the correct plate to copy was easily solved. I had previously consulted several times by letter with **Gerald M. Best** of Beverly Hills, CA. When I told him that we had found a Rhode Island plate to copy, he mentioned in passing that he also had an 1888 Rhode Island plate that was in flawless condition. He immediately sent his plate to us postage and insurance paid for both directions. After we got a perfect copy in aluminum, all we had to do was change the 1888 to 1887 and cast up a new pair in brass. As original plates of this era have sold for \$700 to \$1000, the new plates were cast up with the words, "Replica, Stolen from Manitowoc County Historical Society" clearly printed on the reverse side.

Thus, if one or both of the plates should be removed from the engine, (they haven't so far), the thief would not have gotten away with much.

The missing whistle presented another problem. During a general search for parts, we turned up whistles in a number of different locations. One collection contained nearly 100 different steam whistles. Obtaining one was, however, another matter. Each one was considered priceless by its owner and was not for sale under any conditions.

A letter to the Canadian Locomotive Co. at Kingston, Ontario hit pay dirt. It yielded a blueprint for a standard "Lonergan" steam whistle that had originally been available in several sizes, with dimension tables showing the pertinent dimensions for each size.

Shortly before this happened, the Lincoln electronic shop received a ship's radio direction finder as a donation from the Manitowoc Shipbuilding Co. In adapting it to fit on our building, we had to cut off the column for the aerial loop about two feet. The column was four inch diameter brass tubing with a wall thickness of one eighth inch. This was the perfect size and material for the bell of a standard four inch whistle. We made up a set of wooden patterns complete with core boxes where needed and cast our own whistle body using some of the scrap brass furnished by Miller as raw material. When machined and assembled, the only parts not made in the shop were the bell and the valve return spring. The whole thing was done as a project by various members of the metals department's foundry and machine shop classes.

Another part that needed back dating was the head light. The photo of 321 clearly indicated that the headlight was different than those on the 323 and 325 but was very similar to if not exactly like the one on the Great Northern's William Crooks, which was displayed at the St. Paul Union Depot. A letter of explanation, along with a drawing indicating where dimensions were needed, was sent to the station master of the depot. A short time later, the drawing was returned to us with all dimensions filled in along with two additional supplementary sketches of details. The station master must have

had a great time climbing all over the engine to get the measurements.

Although that took care of the exterior of the headlight, it gave us no hint what the interior, including the light itself, fuel tank, etc. was like. Having seen a photo of **Ward Kimbal's** narrow gauge 2-6-0, "Emma Nevada", I knew that the inside must be very similar. A letter to Mr. Kimbal, one of Walt Disney's main animators, brought us a bonanza that not only solved this problem but verified and greatly expanded the data from the William Crooks. Mr. Kimbal happened to have a headlight case from a standard gauge locomotive of the 1880-1900 period. He took photos of it, both general and detail shots, and sent us a dozen 8 x 10 enlargements along with a drawing including all necessary dimensions. He also sent photo copies of several pages from an old railroad equipment catalog showing interior and exterior details for several different types of headlights. To top it all off he included full size tracings of the decorative paint work that was on the original paint job of the headlight and still showed faintly under the later coats of black paint.

Armed with this information, it was only a matter of time before we were able to make a nearly perfect duplicate of the original. In the process we used nearly every type and combination of sheet metal pattern development and layout. The task was given to two of my most able sheet metal students, **Jerry Scheinoha** and **Pat Thirey**. They mounted it on an authentic wooden base made by **John Schlei** as an extra credit project in the wood shop. The project came off so well that I elected to start from scratch when we made the backup light the next year. Material for the headlight cases came from the outside sheets from bundles of sheet steel used by the Kelvinator Co. in the manufacture of refrigerators. The outside sheets had rust spots on them and were unusable for quality production but there was plenty of good steel to be had by just cutting around the rust.

The one thing that we couldn't duplicate was the spun, silver plated copper reflectors. The 24 inch parabolic reflectors were just more than we could handle. Letters were sent out to various manufacturers of photo flood light reflectors explaining our plight. The Photogenic Machine Co. of Youngstown, OH sent us two partially

completed aluminum flood-light reflectors. They had to be modified by cutting out the recessed back which was designed to take an electric light fixture and cutting holes to fit the base of the lamp and lamp chimney. Finally the hole in the back had to be filled by inserting a shallow parabolic shaped five inch disk to make the curved surface complete. A hard maple form of the proper shape was turned on a lathe and aluminum disks were spun and polished over the forms. The disks were fastened to the main reflectors with epoxy. We had misgivings as to the durability of the joint but they have been in place for many years with overall temperatures varying by more than 120 degrees with no sign of deterioration.

Smaller cast parts included: sand dome cover, smoke box clean out cover along with the steps and brackets at the back of the cab (all of aluminum), brass "Rhode Island" plates to mount on the cylinder sides, number plates (both a #38 in original Rhode Island style, and standard Soo line 8 sided numbers for 321) so we can change our mind as to how it is presented and a commemorative plate acknowledging the Miller Compressing Co.

The tender required new wooden end sills as the old ones were rotted beyond any possible use. New 12 x 12 timbers were obtained from a building being razed on the site of the present Wisconsin Maritime Museum. It was part of the original Goodrich steamship company complex. Where necessary, new bolts were turned by machine shop students. Standard nuts to fit were obtained from the shipyard. The foot boards at the tender rear were badly bent out of shape so the steel braces were heated and reforged straight. The coal bunker and manhole on the tender were much too high for the tender of the 321, so were also cut down to size with a flame cutting torch.

Moving to Pinecrest Village

While all of this restoration was going on, the Historical Society finally acquired a 40 acre plot on which to move historic buildings to start the historic village. The land was donated to the society by **Hugo Vetting**, a retired C&NW engineer. One of the early buildings moved to the site was

the Soo Line (originally Wisconsin Central) depot from Collins, WI, a few miles west of the village site. The Depot had been purchased by the Clipper City Model Railroad Club and donated to the Society to go with the 321 as a part of the "Railroad Exhibit" portion of the village. The cost of moving the building to the village was borne by the Historical Society.

Rail came from a section of the original Manitowoc Rapid Transit system when the rails, unused for over 40 years, were finally removed from the street. More rail was made available when a siding was removed from the site of the Red Arrow Products Company. Used ties were ours for the taking from an area in the North Western carferry dock yards that had already had the rails taken up. Although the site and materials for laying track were ready, we were in no hurry to move the engine which was very well protected where it was.

The restoration and clean up work proceeded very slowly for two and a half years. Although we probably had 50 or more people that helped at one time or another, the bulk of the work was done by eight people with probably half of that done by two. It became very difficult to go out to the roundhouse week after week, year after year. Towards the end it very nearly came to a complete stop.

Added impetus came when we were informed by the C&NW in mid May of 1971 that because of a roundhouse refurbishing job, the engine would have to be moved out within 30 days. Activity became very fierce for a short time with most of the work concentrated on finishing the sand blasting on the tender trucks and painting the engine.

Enough ties and rail were laid in front of the depot at the site, by then known as "Pinecrest Historical Village", to hold the engine and tender. Pinecrest was not located near any rail line, so the engine and tender had to be moved to the location by road.

Eis Structure Movers, the firm that has moved all the buildings, was notified that the 50 ton engine had to be moved as soon as possible. The proper permits were obtained and preparations for the move were made.

The 321 was backed out of the roundhouse by a North Western

switcher and the moving equipment was brought into place. The locomotive and tender were each jacked up separately and temporarily placed on cribbing while a steel girder frame was built under each to support the load on the rubber tired dollies. The locomotive was mounted on three, eight-wheeled dollies and the tender was mounted on three, four-wheeled dollies.

With a truck on the front of each, the entourage started out early in the morning. A minor scheduling problem showed up within a half mile of the roundhouse when it was discovered that part of the route that had been selected for the move was in the process of receiving a brand new coat of hot mix blacktop. The road crew was most unhappy about it but the permits were in order so the engine and tender proceeded over the fresh blacktop leaving wide depressions close to an inch deep. I assume it wasn't too great a problem as there was no sign of them the next time I took that road.

The move out to the village entrance was uneventful and was accomplished in less than a half hour. The final leg was a good deal more interesting than we preferred. The driveway into Pinecrest takes a sharp turn to the left, crosses a deep gully on a gravel fill that slants quite steeply down grade, and then proceeds up an even steeper grade several hundred feet long before flattening out somewhat. Because of the narrowness of the filled area of the driveway, several truckloads of gravel were added to the right bank to widen and firm things up for the move. Mr. Eis was a bit worried about the stability of the new gravel, which hadn't had time to settle, so he crowded the left edge of the driveway on the way past the fill. Unfortunately, the left side wasn't very stable either and promptly started to cave in, heeling the 321 over at a gut wrenching angle. It appeared that instead of having a fine example of an 1887 locomotive at the depot, we would have a fine example of an 1887 train wreck at an angle that gave easy inspection of the under-carriage. Mr. Eis immediately stopped the truck and assessed the situation without any sign of alarm. With total coolness, he directed the setting of jacks to lift the left side up high enough so cribbing and planking for the tires to roll on could be placed under it and the load was level again. The tender was left at

the driveway entrance and the truck towing it was moved into position to run a cable down to the back of the 321. It could then be winched down the rest of the grade on heavy planks to spread out the weight. While that was going on, the other truck was taken up to the top of the next hill. After careful placement, a cable from that truck's winch was run down to connect to the front of the 321 to pull it up the next grade.

The move up the hill was also totally planked and a person with a piece of 6 x 6 blocking followed behind the back wheels of the rear dollies, keeping the blocks within inches of the wheels so that if the cable broke, the blocks would prevent any rollback. It went slowly, but in perfect order. Once the engine was up on the more or less flat area, it was blocked and left so that we could use the same procedure with the tender. By quitting time, both the engine and tender were securely located up on the flat.

As there was no big hurry about getting things to the depot, the engine and tender were both left there for some time while Mr. Eis took care of some other pressing jobs. Within a couple of weeks though, the 321 and tender were properly in place in front of the depot and looked like they really belonged there.

Once at the depot, there was little chance to work on things since there was no electricity available for working after dark and no apparent desire on anyone's part, including mine, to spend weekends finishing up details. It stood for several years without main rods, eccentrics, and links and several more years before the whistle and Rhode Island cylinder plates were added. There is still much to do both outside and inside the cab. The big push right now is to get a bracket cast and fabricated to fit a bell that we finally obtained so that the empty spot between the steam dome and cab will again look right.

During special events, one or more of those of us who resurrected the 321 are on hand to answer any questions that anyone might have. There are three types of people that stop at the depot. The largest group (90%) say "My but that's nice" or are totally indifferent about the engine

but want to see if the penny scale in the depot is accurate (it is). In the second group are those who are very knowledgeable about steam and stop to talk (and listen) until someone drags them away. The third group knows nothing about a steam locomotive but wants to know everything. The second and third groups make the years of work totally worthwhile.

The depot now has electricity and with retirement for me just around the corner, I hope that given time, no one but a locomotive nut like me will be able to tell that the 321 is anything less than perfect. Will it ever run again? Who knows? The Pinecrest Village has no room for a working railroad but with enough time and money it would be feasible to put it back into running shape. However, I won't hold my breath 'till it happens.

NSP'S MOBILE POWER PLANTS

When World War II ended, Northern States Power Co. (NSP) faced a rapid increase in small town electrical demand that exceeded the capacity of its coal fired and hydro power plants. New plants were coming, but temporary generating capacity was needed.

The answer was diesel power plants. NSP bought 32 of them, and at one point had more diesel generation capacity (about 20 megawatts) than any other utility in the country. Most were installed at a specific site where they stayed. Three became mobile units.

The two rail units were basically locomotives in a boxcar. Mobile Unit #1 was built in November 1946. The 539 Alco 660 hp diesel in the custom built boxcar generated 760 kilowatts and was put to work at Mayville, ND, where it supplied enough electricity for the town and surrounding farms. Unit #2 with its larger 1000 kw generator was added in 1952, along with a smaller 175 kw unit that traveled by truck. #2 was powered by a General Motors EMD 567A 12 cyl. 1000 hp. diesel, equivalent to an NW2 switch engine.

According to an article in NSP News, the units traveled to such locations as Larimore, ND and Salem



NSP mobile generating plant #2. Minnesota Historical Society collection.

and Sioux Falls, SD. In the meantime, NSP was adding permanent capacity, about 500 megawatts during the 1950's. This included about 50 mw from the former TCRT steam and hydro plants.

Although they filled an important niche, the diesels were expensive to run, up to three times the cost of a coal-fired plant. The railcars spent their last operating years as peaking plants at Winona.

In 1980 they were moved to the Allen S. King plant in Bayport, with the intent of using them as emergency generators in the unusual event of a total blackout. They turned out to be in rough shape, having not run for about ten years. Their instruments showed more than 100,000 hours of operation. The combined cost to overhaul them and then hook them up was prohibitive and they were never used.

They were sold in the early 1980's to a construction company in Wyoming or Colorado.

Thanks to **Ross Hammond, Dick Andree** and **John Schmidt** for supplying information for this article.

FIGHTING SATAN'S WEED

This Soo Line company memo from the Minnesota Historical Society collection was issued on June 6, 1938.

INSTRUCTIONS TO SECTION FOREMEN

The American Legion and the Legion Auxiliary of Minnesota is making a statewide campaign to destroy the narcotic plant (Marijuana) and has requested that our section men cooperate with the Legion in searching for and destroying the plant.

Representatives of the Legion will call on you and familiarize you with its characteristics and request that you destroy any of this plant on your section of the right of way.

When you have become familiar with these characteristics you will, during your routine duties, keep close look out for the plant and remove and destroy in accordance with methods recommended by the Legion representative, with the understand (sic) that you will use no methods that conflict with the forestry laws or regulations and rules of this company.

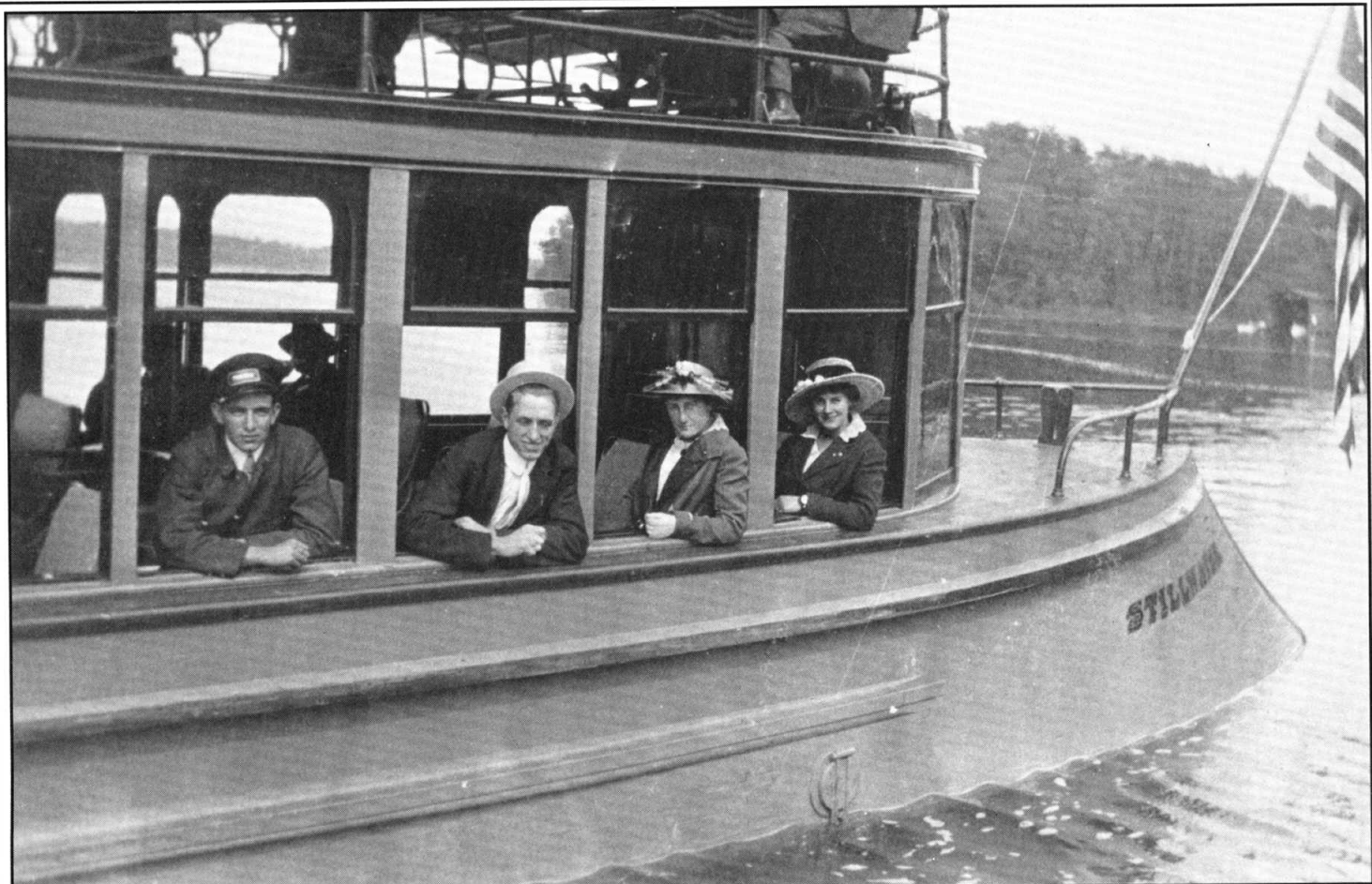
T.Z. Krumm



Above: Water Street in downtown Excelsior about 1920. Excelsior Historical Society collection.

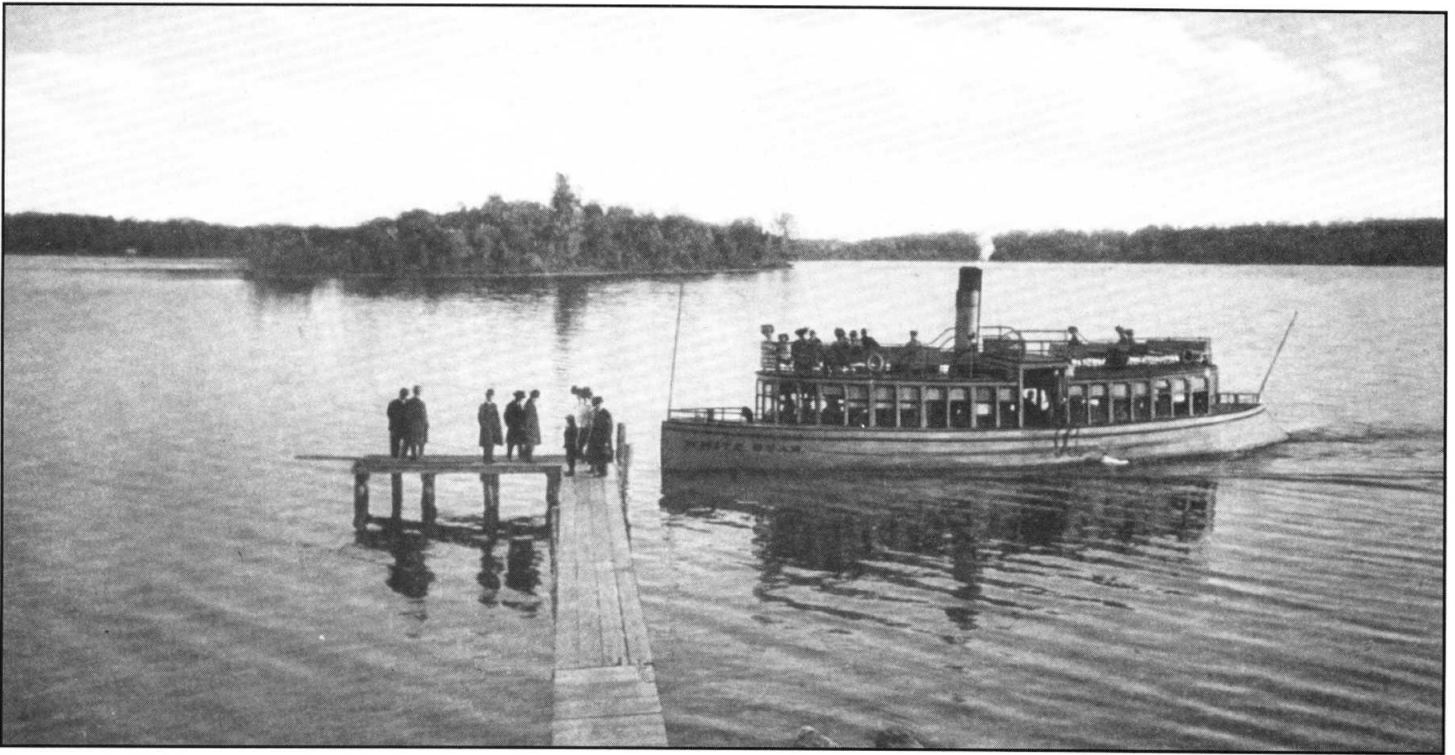
Below: Buses replaced the streetcars to Lake Minnetonka on August 11, 1932. This is one of the first buses to leave Excelsior. Note the Red Owl Store sign. Minnesota Historical Society collection.





Above: A closeup of the Stillwater, showing the torpedo stern. Tom and Mary Mann collection.



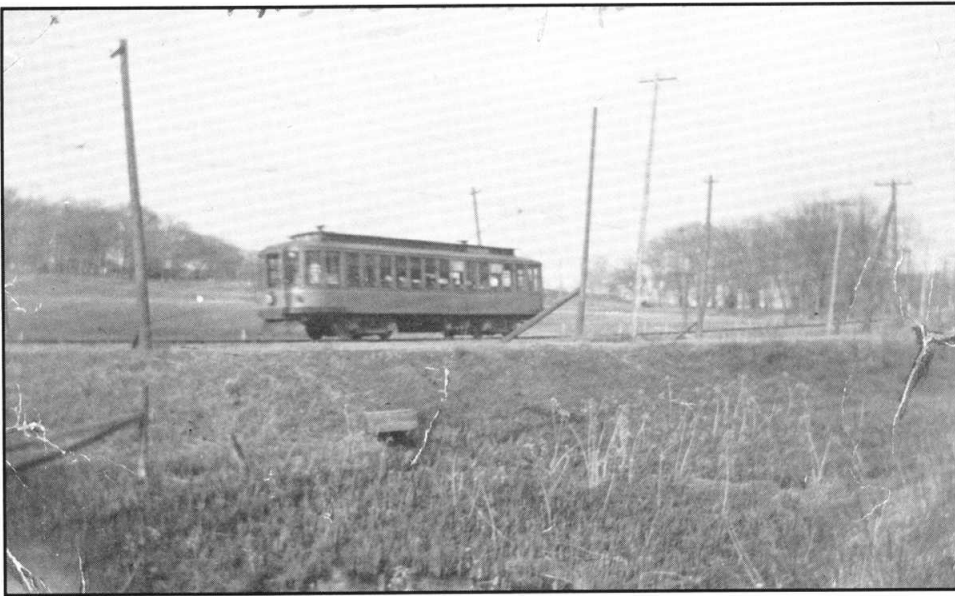


Above: The White Bear calls at Shady Island on the Zumbra Heights line in this TCRT postcard. MTM collection.

Below Left: The Stillwater with a full load. The boat in the background appears to be the gas engined Harriet, currently being restored for owner Fred Bruncheon, who will return it to Lake Minnetonka. Hennepin County Historical Society collection.

Below: An unknown express boat at Excelsior, in this cracked glass plate. Minneapolis Public Library collection.





Above: For some reason, Lake Minnetonka streetcar photos are extremely rare. Ralph Sigafoos of Mound, who remembers riding the express boats as a child, brought in this 1913 snapshot taken near Tonka Bay.

Below: When railfan and switchman James Barrick worked in the Peoria & Pekin Union yards, he carried a camera in his pocket in case something interesting came along. One 1947 day, brand new TCRT PCC #357 appeared on an Illinois Terminal flatcar, headed from the factory in St. Louis. George Isaacs learned of the photo when he met Barrick at the 1994 meeting of the Illinois Traction Society.





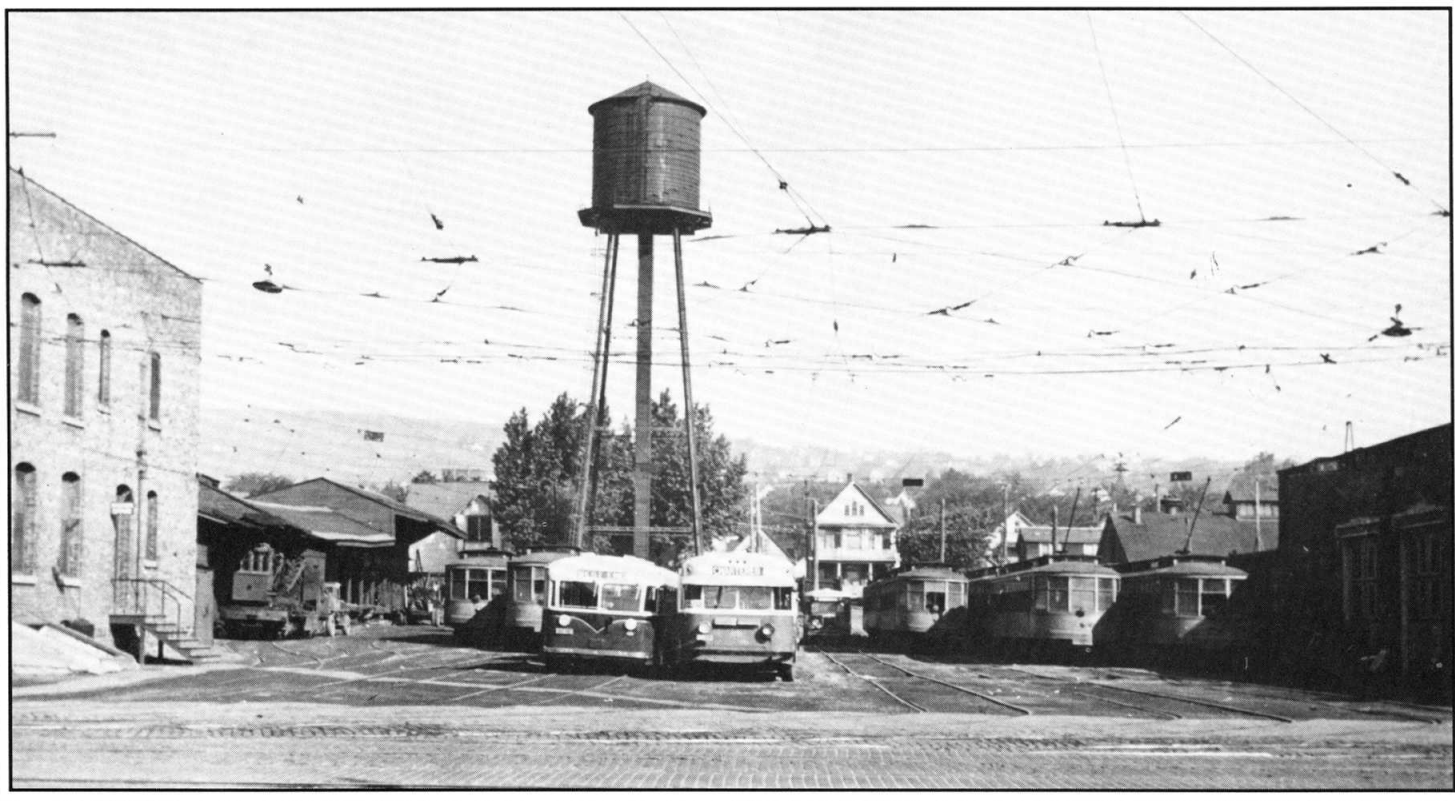
Above: The short-lived Bethania Mineral Springs station, located a mile below Osceola. The wooden tank held beverages for tank car loading. Osceola Historical Society collection.

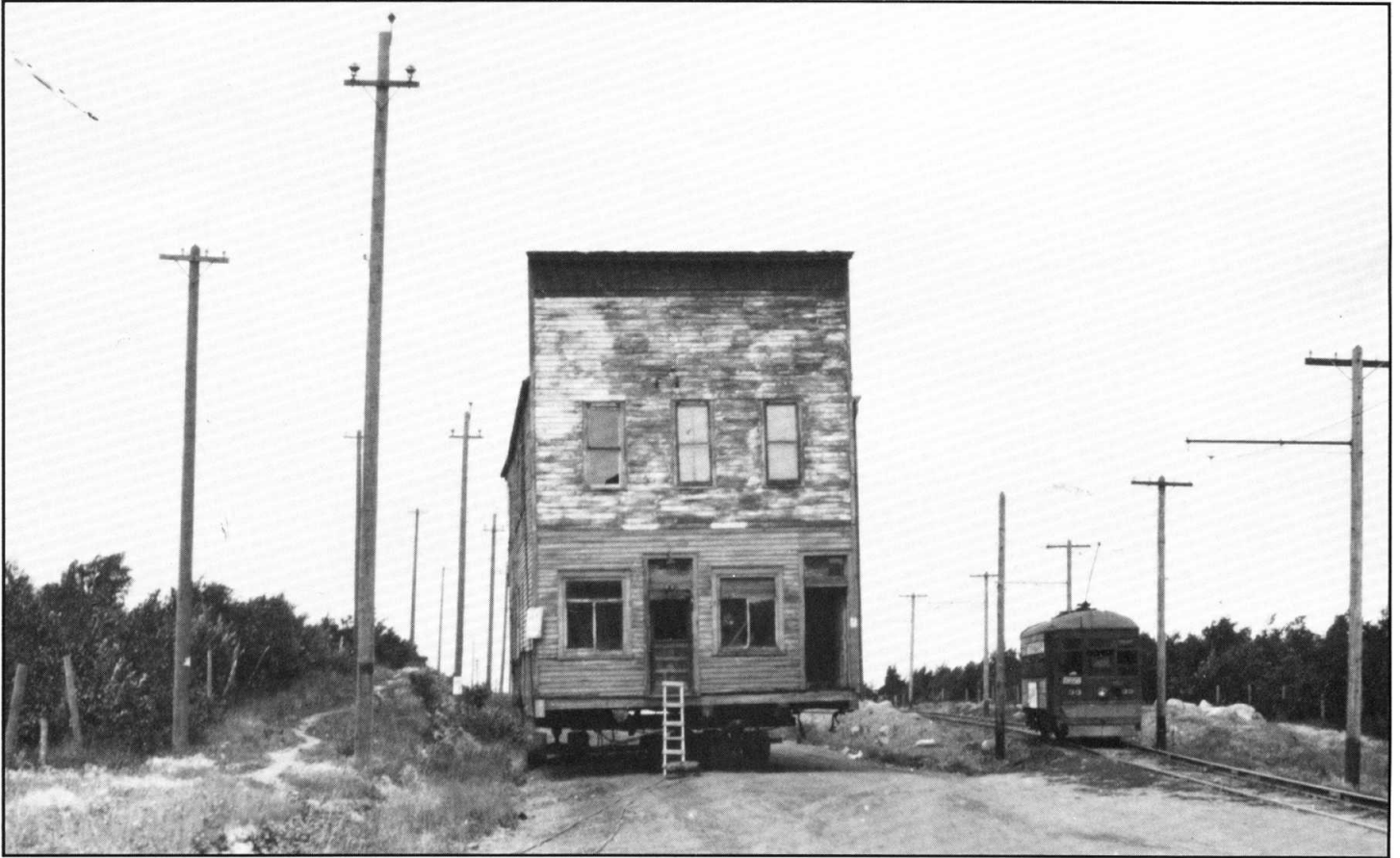


Left: Cleveland, MN is located on the Milwaukee Road's Farmington - Mankato branch. The depot was a classic two-story standard design. The agent and his family lived upstairs—witness the wash hanging on the line in this 1950's view. Vir Keljik photo.



A generation separates these views of the Duluth Street Ry. carhouse at 26th Ave. W. & Superior Street. During that time trolley buses and double wire have intermingled with the streetcars, all of which have been lost their rear gates to rebuilding. A couple of trees have sprung up behind the water tower. Both Northeast Minnesota Historical Society collection.

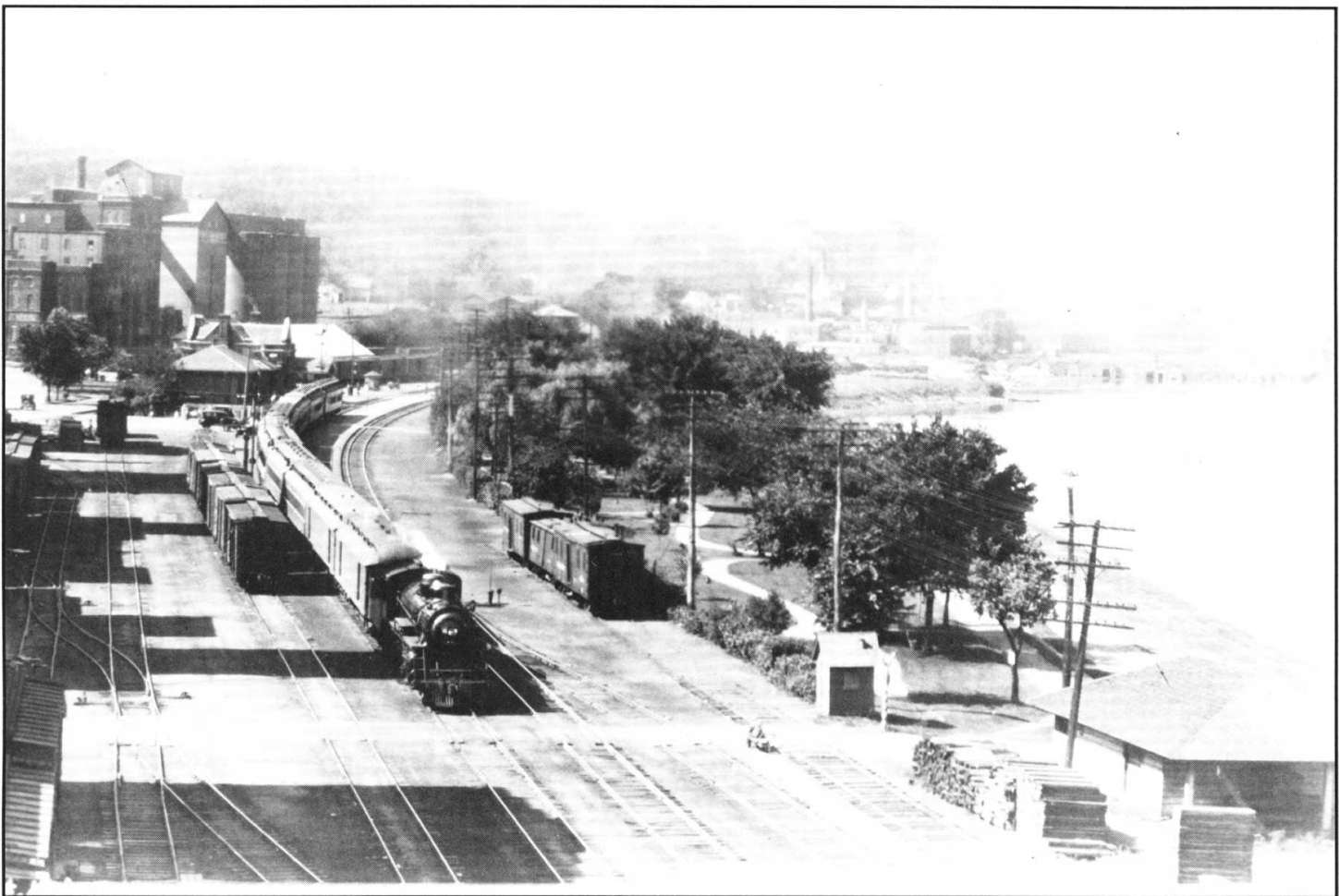




Above: The Fall 1992 Minnegazette ran an article on the Mesaba Ry. streetcar service in Hibbing. In this 1923 photo, one of the two local cars passes a building being moved from North to South Hibbing, to make room for the expanded iron ore pit. The location appears to be along N. 1st Street. Northeast Minnesota Historical Society collection.

Below: On a hazy overcast day in 1970, three F units and a chop nosed SD lead a southbound freight down the long grade into the Minnesota River valley east of Chaska on the Minneapolis & St. Louis. This line is now abandoned. Joe Elliott photo.





Above: About 1930, a Milwaukee Road limited calls at Red Wing. Goodhue County Historical Society collection.

Below: Northern Pacific's train 11, the overnight from St. Paul to International Falls, was rarely photographed. Here, illuminated by the rising sun, it arrives at its northern terminus. R. V. Nixon photo, MTM collection.

Inside rear cover: Late on the wet evening of October 10, 1949, Milwaukee Road Baldwin switcher #1635 crosses 3rd Avenue South with cars for the warehouse located between 1st and 2nd Streets. At left is the shadowy tower of the Milwaukee depot and City Hall. The bright light sits atop the Northwestern Bell Telephone building. Norton & Peel photo, Minnesota Historical Society collection.

Rear cover: A southbound Como-Harriet car unloads two barely visible passengers at the Plaza Hotel, at the intersection of Lyndale and Hennepin Avenues across from Loring Park. I-94 now runs through the hotel site just north of the Lowry Hill tunnel. The photo dates from about 1910, before the Basilica was built. Minnesota Historical Society collection.







MINNESOTA STREETCAR MUSEUM

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August 2021

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